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LIST

OF THE

SPECIMENS

OF

LEPIDOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM (Nat. his

Dept. of zoology.

BY

FRANCIS WALKER, F.L.S.

PART IX.—NOCTUIDÆ.

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PREFACE.

THE object of the present Catalogue is to give a complete list of all the genera and species of Noctuidæ known to exist in the different collections. The letters *a*, *b*, *c*, &c., after the species, denote the specimens now contained in the British Museum, followed by the *habitat* and the mode in which each of them was obtained, and the absence of these *letters* indicates the species which are desiderata, and therefore desirable to be procured for the collection.

JOHN EDWARD GRAY.

British Museum,
October, 1856.

This volume contains

Bombycidæ
(in full)
Cymatophoridæ p. 8
Brygophilidæ " 18
Bombycidæ " 30

Geometridæ
Sencaridæ 69
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Epiplemidæ " 153

CATALOGUE

OF

LEPIDOPTERA HETEROCERA.

THIRD SERIES.

Tribe 7. NOCTUITES.

Corpus plerumque robustum. Proboscis sæpissime mediocriter longa. Palpi distincti, sæpe longiusculi, raro longissimi. Antennæ setaceæ, graciles, thorace longiores, *maris* nonnunquam pectinatæ. Abdomen alas posticas sæpissime superans. Pedes mediocriter longi et robusti, nonnunquam graciles; tibiæ posticæ sæpissime calcaribus quatuor longis. Alæ mediocriter latæ, raro angustæ aut latissimæ; anticæ apud costam rectæ, apice rotundatæ aut angulatæ, margine exteriore sæpissime integro. Larva raro pilosa. Pupa sæpissime nuda.

Noctuidæ, *Steph. Syst. Cat.* 2, 62; *Ill. Brit. Ent. Haust.* ii. 100; *Herr.-Schæff.*

Phalæna-Noctua et Bombyx, p., *Linn.; Gmel.*

Noctua, *Fab.; Haw., &c.*

Noctuæ Bombycoides, Genuinæ et Semigeometræ, *Hübn. Verz. Schmett.*

Noctuina (Noctuites, Catocalites et Phytometrites), *Newman, Ent. Mag.* ii. 382.

Noctuæ, *Boisd. Ind. Méth.*
Noctuelites, *Latr.; Godart; Guénée, Hist. Nat. Noct.*
Noctuina, *Stainton, Ins. Brit. Lep. Tin.* 4.
Noctuo-Bombycidi, *Guénée, Ann. Soc. Ent. Fr.* vi. 313.

Body generally stout. Proboscis very generally moderately long. Palpi distinct, often rather long, very long in a few species. Antennæ setaceous, slender, longer than the thorax, rarely pectinated, except in the males of some species. Abdomen generally extending beyond the hind wings. Legs most frequently moderately long and stout, occasionally slender; hind tibiæ generally with four long spurs. Wings moderately broad, rarely narrow or very broad, seldom long. Fore wings straight in front, rounded or angular at the tips, moderately or very oblique along the exterior border. Larva generally naked, cylindrical and robust, and with ten prehensile feet, in some families elongate and slender, more or less looping, and with eight or sixteen prehensile feet. Pupa mostly changing in the ground, rarely in a slight web.

The distinction between the *Noctuites* and the *Bombycites* has been already mentioned, and the former, with very few exceptions, may easily be distinguished from the *Geometrites*, but some of the aberrant groups are closely allied to the *Pyralites*, whose structure is extremely variable.

Div. 1.

Palpi breves aut mediocres; articulus 3us nunquam longus nec spatulatus.

Noctuelites Trifidæ, *Guénée.*

Div. 2.

Palpi semper longi et ascendentes; articulus 3us longus, filiformis, nonnunquam spatulatus.

Noctuelites Quadrifidæ, *Guénée.*

Div. 1.

Statura sæpissime mediocris. Corpus sæpissime robustum. Palpi plus minusve determinati; articulus 3us nunquam longissimus nec spatulatus. Thorax plus minusve pilosus. Alæ mediocres; posticæ minus amplæ; vena 1a inferior dum adest sæpissimæ debilior et apud areolæ medium inserta, plica discali contigua.

Species generally of moderate size. Body most frequently stout. Palpi more or less apparent; third joint never very long, nor enlarged towards the tip. Thorax more or less pilose. Wings of moderate breadth, or narrow. Hind wings less ample than the fore wings; first inferior vein, when apparent, less developed than the others, and inserted in the middle of the areolet near the discal fold.

Subdiv. 1.

Palpi breves, validi. Pedes non longi.

Palpi short, stout. Legs not long.

Trifidæ Bombyciformes, *Guénée.*

Subdiv. 2.

Palpi validi, bene determinati. Pedes robusti.

Palpi stout, well-developed. Legs robust.

Trifidæ Genuinæ, *Guénée.*

Subdiv. 3.

Corpus gracile. Pedes longi, graciles. Alæ latæ.

Body slender. Legs long, slender. Wings broad.

Trifidæ Minores, *Guénée.*

Subdiv. 1.

A. Alarum posticarum venæ costalis et subcostalis basi disjunctæ. Fam. 1. CYMATOPHORIDÆ, *Herr.-Schæff.*

B. Alarum posticarum venæ costalis et subcostalis basi conjunctæ, aut basim versus connexæ.

A. Palpi bene determinati. - Fam. 2. BRYOPHILIDÆ, *Guén.*

B. Palpi breves. - - - Fam. 3. BOMBYCOIDÆ, *Guén.*

Fam. 1. CYMATOPHORIDÆ.

Corpus gracile, aut vix robustum. Proboscis mediocriter longa. Palpi plus minusve pilosi, breviusculi aut caput paullo superantes. Antennæ simplices, sæpe subserratæ. Abdomen alas posticas non aut perpaullo superans. Pedes graciles aut subvalidi;

tibiæ posticæ calcaribus quatuor longis. Alæ latæ aut sat latæ; anticæ apud costam rectæ aut subconvexæ, apice rotundatæ aut vix angulatæ, margine exteriore subobliquo aut sat obliquo.

Noctuo-Bombycidæ, *Guén. Noct.* i. 9.
Noctuo-Bombycini, p., Bombycoides, p., et Hadenides, p., *Boisd. Ind. Méth.* 94, 130.
Hadenidi, p., Bombycoidi, p., et Noctuo-Bombycidi, p., *Steph. Cat. Brit. Lep.* 100, 114, 119,
Cymatophoridæ, *Herr.-Schæff. Eur. Schmett.* ii. 167.

Body moderately stout, or more or less slender. Antennæ simple, often slightly serrated. Abdomen extending as far as or very little beyond the hind wings. Legs slender or moderately stout; hind tibiæ with four long spurs. Wings broad, or moderately broad. Fore wings straight or slightly convex in front, rounded or hardly angular at the tips, slightly or moderately oblique along the exterior border.

A. Thorax cristatus.
  A. Alæ anticæ squama basali distincta. 1. GONOPHORA, *Bruand.*
  B. Alæ anticæ squama basali nulla aut minima. 2. THYATIRA, *Ochs.*
B. Thorax non cristatus.
  A. Palpi breves, caput non superantes. - 3. LEPTINA, *Guén.*
  B. Palpi brevissimi. - - - - 4. CORULA, *Walk.*
  C. Palpi porrecti, caput superantes. 5. CYMATOPHORA, *Treit.*

Genus 1. GONOPHORA.

Corpus sat robustum. Proboscis mediocriter longa. Palpi porrecti, caput paullo superantes; articulus 2us pilosissimus; 3us gracilis, linearis, breviusculus. Antennæ simplices. Abdomen alas posticas perpaullo superans. Pedes mediocriter longi et validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ subacuminatæ, apud costam rectæ, margine exteriore mediocriter obliquo.

Gonophora, *Bruand, Ann. Soc. Ent. Fr. 2me Sér.* vii. 42.
Phalæna-Noctua, p., *Linn.; Gmel.*
Noctua, p., *Fabr.; Wien. Verz.; Esp.; Hübn.; Haw.; Donov.*

Cymatophoridæ

Thyatira, p., *Ochs.; Treit.; Dup.; Boisd.; Guén.; Steph.; Herr.-Schæff.*
Strophia, p., *Meigen.*

Body moderately stout. Proboscis moderately long. Palpi porrect, extending a little beyond the head; second joint very pilose; third slender, linear, rather short. Antennæ simple. Abdomen extending very little beyond the hind wings. Legs moderately long and stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, very slightly acuminated at the tips, moderately oblique along the exterior border; first and second inferior veins contiguous at the base; third remote; fourth very remote.

Europe.

1. Gonophora derasa.

Cervina, subtus albida; thorax albo bifasciatus; abdomen pallidissime fuscescens; alæ cinereo-fuscæ anticæ cervino variæ fasciis tribus obliquis costaque media albis, ocellis duobus strigisque lanceolatis discalibus fusco-albis; posticæ albido marginatæ et subfasciatæ.

Gonophora derasa, *Bruand, Ann. Soc. Ent. Fr. 2me Sér.* vii. 42.
Phalæna-Noctua derasa, *Linn. Syst. Nat.* i. 2, 158. *Gmel. ed. Syst. Nat.* i. 5, 2568, 158. *Donov. Brit. Ins.* vii. 17, pl. 223, f. 1. *Stew. El. Nat. Hist.* ii. 190. *Turt. Syst. Nat.* iii. 320.
Noctua derasa, *Fabr. Sp. Ins.* ii. 229, 103; *Mant. Ins.* ii. 164, 200; *Ent. Syst.* iii. 2, 85, 250. *Wien. Verz.* 87, 2. *Kühn. Naturf.* ii. pl. 1, f. 7 *Naturf.* 1774, 10. *Bork. Eur. Schmett.* iv. 657. 281. *Esp. Schmett.* iv. pl. 142, f. 1; pl. 193, f. 4, 6. *Hübn. Eur. Schmett. Noct.* pl. 14, f. 66. *Haw. Lep. Brit.* 244.
Thyatira derasa, *Treit. Schmett. von Eur.* v. 165, 2. *Steph. Ill. Brit. Ent. Haust.* iii. 47, 1; *Cat. Brit. Lep.* 103, 2. *Duponch. Hist. Nat. Lép. Fr.* vii. 43, pl. 103, f. 2. *Guén. Ind.* 245; *Hist. Nat. Noct.* i. 11, 1. *Boisd. Ind. Méth.* 130, 1042. *Westw. & H. Brit. M.* i. 201, pl. 41, f. 13; pl. 42, f. 114. *Herr.-Schæff. Eur. Schmett.* ii. 170, 10.
Noctua Pyritoides, *Hüfn. Berl. Mag.* iii. 400.
——— ———, *Wilkes*, pl. 6, f. 3. *Harris, V. M.* 9. *Engr. Pap. d'Eur.* pl. 530.
Habrosyne derasa, *Hübn. Verz. Schmett.* 236, 2354.

Strophia derasa, *Meig. Handb. Ent.* 167, 48; *Syst. Besch. Eur. Schmett.* iii. 1742, pl. 19, f. 5.

a—g. England. From Mr. Stephens' collection.
h—k. England.
l—o. Europe. From M. Becker's collection.
p, q. ——?

North America.

2. Gonophora scripta.

Cervina, subtus albida; caput albidum; thorax albido fasciatus; abdomen pallidissime fuscescens; alæ anticæ cinereæ, cervino variæ, fasciis tribus obliquis, costa media, ocellis duobus strigisque lanceolatis discalibus albis; posticæ subcinereæ, albido marginatæ et subfasciatæ.

Thyatira scripta, *Gosse, Canadian Naturalist*, 249.
Thyatira abrasa, *Guén. Noct.* i. 12, 2.

a—d. New York. Presented by E. Doubleday, Esq.
e. Orilla, West Canada. From Mr. Bush's collection.

Asia.

3. Gonophora gloriosa.

G. scriptæ *simillima; alæ anticæ angulo albido interiore magis determinato.*

Thyatira gloriosa, *Boisd. MSS.*
Thyatira abrasa, *var.* gloriosa, *Guén. Noct.* i. 12, A.

Caucasus.

Genus 2. THYATIRA.

Corpus sat gracile. Proboscis mediocriter longa. Palpi ascendentes, caput paullo superantes; articulus 2us pilosissimus; 3us gracilis, linearis, breviusculus. Antennæ subserratæ. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam vix convexæ, apice acuminatæ, margine exteriore subobliquo.

Thyatira, *Hübn. Verz. Schmett.* 236.
Phalæna-Noctua, p., *Linn.; Gmel.*

Noctua, p., *Fabr.; Wien. Verz.; Esp.; Hübn.; Haw.; Donov.; Bruand, Ann. Soc. Ent. Fr. 2me Sér.* vii. 42.
Thyatira, p., *Ochs.; Treit.; Dup.; Boisd.; Guén.; Steph.; Herr.-Schæff.*
Strophia, p., *Meigen.*
Calleida, *Sodoff, Bull. Soc. Imp. Nat. Mosc.* 14, 1837.

Body rather slender. Proboscis moderately long. Palpi ascending, extending a little beyond the head; second joint very pilose; third joint slender, linear, rather short. Antennæ minutely serrated. Abdomen not extending beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings hardly convex in front, rounded at the tips, slightly oblique along the exterior border.

Europe.

1. Thyatira Batis.

Fusca; thorax lineolis transversis undulosis albidis; abdomen albidum; alæ anticæ maculis tribus basalibus tribusque exterioribus fuscis albo-nigroque marginatis, his ex parte roseis; posticæ pallide fuscæ, basi ciliis fasciaque albidis.

——— ———, *Réaum. Ins.* i. pl. 7. *Merian, Ins. Eur.* iii. pl. 21, f. 1. *Roës. Ins.* iv. pl. 26. *Wilkes*, pl. 10, f. 6. *Harr. Ex.* pl. 13, f. 3; *V. M.* 13.

Thyatira Batis, *Treit. Schmett. Eur.* 2, 162, 1. *Hübn. Verz. Schmett.* 236, 2355. *Dup. Hist. Nat. Lép. Fr.* vii. 46, pl. 103, f. 3. *Curt. Brit. Ent.* ii. pl. 72. *Steph. Ill. Brit. Haust.* iii. 48, 2; *Cat. Brit. Lep.* 103, 1. *Boisd. Ind. Méth.* 130, 1041. *Guén. Ind.* 245; *Hist. Nat. Noct.* 12, 3. *Herr.-Schæff. Eur. Schmett.* ii. 170, 9.

Phalæna-Noctua Batis, *Linn. Syst. Nat.* i. 2, 286, 97; *Faun. Suec.* 1158. *Gmel. ed. Syst. Nat.* i. 5, 2546, 97.

Noctua Batis, *Fabr. Sp. Ins.* ii. 216, 42; *Mant. Ins.* ii. 141, 56; *Ent. Syst.* iii. 2, 30, 73. *Wien. Verz.* f. 1, 7. *Esp. Schmett.* iv. pl. 86, f. 6—8; pl. 103, f. 7—9. *Bork. Eur. Schmett.* iv. 159, 65. *Hübn. Eur. Schmett. Noct.* 14, pl. 65. *Haw. Lep. Brit.* 245.

Strophia Batis, *Meig. Handb. Ent.* 166, 47, pl. 12, f. 10; *Syst. Beschr. Eur. Schmett.* 174, 1, pl. 109, f. 6.

a, b. England. From Mr. Carter's collection.
c—l. England. From Mr. Stephens' collection.
m. England. From Mr. Stevens' collection.

n—p. England.
q—s. Europe. From M. Becker's collection.
t. ———?

North America.

2. Thyatira pudens.

Fusca; alæ anticæ lineis angulosis transversis, lunulis marginalibus nebulisque nigris; maculis basalibus posticis et costalibus fuscescentibus roseo-albo cinctis; posticæ cinereæ, dimidio basali lineaque transversa albidis.

Thyatira pudens, *Guén. Noct.* i. 13, 5.

a. Northern United States. Presented by E. Doubleday, Esq.

3. Thyatira Cymatophoroides.

Cinerea, robusta; palpi porrecti, caput superantes; antennæ fulvæ, graciles; alæ anticæ nigro ex parte conspersæ, rubescente suffusæ, gutta basali, fascia, lituris costalibus subapicalibus, guttis marginalibus maculaque apud angulum interiorem nigris, gutta discali lineisque duabus exterioribus transversis undulatis fuscis; posticæ fascia subobsoleta.

Var. β. *Alæ anticæ fascia maculisque nigris nullis.*

Thyatira Cymatophoroides, *Guén. Noct.* i. 13, 6.

Cinereous, stout. Proboscis rather short. Palpi porrect, extending somewhat beyond the head; third joint short, slender. Antennæ tawny, slender. Fore wings partly sprinkled with black, with a slight reddish tinge, which is most prevalent near the base, with a black basal spot, with a black band near the base, with some black costal subapical marks, with black marginal dots, and with a black spot by the interior angle; also with a brown discal dot, and with two exterior transverse undulating brown lines. Hind wings with a slight band, which is darker on the basal side, and paler exteriorly. Length of the body 6—8 lines; of the wings 18—20 lines.

Var. β. Fore wings without the black band and the black spots.

This species differs much from the other *Thyatiræ*, and will probably be separated from that genus.

a—d. New York. Presented by E. Doubleday, Esq.
e, f. Orilla, West Canada. From Mr. Bush's collection.
g. North America. From Mr. Milne's collection.

Asia.

4. Thyatira vicina.

Pallide fusca; thorax utrinque lineis duabus obliquis albidis; abdomen albidum; alæ anticæ basi, maculis duabus costalibus subapicalibus connexis duabusque posticis roseis albido marginatis.

Thyatira vicina, *Guén. Noct.* i. 13, 4.

Very closely allied to *T. Batis.*

Java.

5. Thyatira repugnans.

Albida; abdomen pallide cervinum, basi albidum; alæ anticæ cinereæ, fusco conspersæ, lineis angulosis fuscis subfasciatæ, albido-cervino quadrimaculatæ, basi albido-cervinæ, costa maculaque parva discali cervinis; posticæ fuscæ, basi albæ.

Whitish. Proboscis long. Abdomen pale fawn-colour, whitish at the base. Fore wings gray, sprinkled with brown, and slightly traversed by zigzag brown lines; base whitish, fawn-colour in front; a small discal fawn-coloured spot, a large apical spot and two smaller posterior marginal spots partly fawn-colour, partly whitish. Hind wings brown, with pale fawn-coloured borders, white towards the base, and with a white streak by the interior angle. Length of the body 6—7 lines; of the wings 14—16 lines.

a. North India. From Mr. James' collection.
b. Ceylon. Presented by R. Templeton, Esq.

Genus 3. LEPTINA.

Corpus gracile. Proboscis mediocriter longa. Palpi breves, porrecti, graciles, caput non superantes; articulus 3us minutus, conicus. Antennæ graciles, simplices. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ; anticæ apud costam subconvexæ aut rectæ, apice rotundatæ, margine exteriore perobliquo. *Mas.*—Antennæ pubescentes. *Fœm.*—Antennæ simplices.

Leptina, *Guén. Noct.* i. 14.

Body slender. Proboscis moderately long. Palpi short, porrect, slender, not extending beyond the head; third joint minute,

conical. Antennæ slender, simple. Abdomen hardly extending beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings rather narrow. Fore wings slightly convex in front, rounded at the tips, very oblique along the exterior border. *Male.*—Antennæ pubescent. *Female.*—Antennæ simple.

A. Alæ anticæ apud costam convexæ.
  A. Alæ anticæ ocello nullo discali. - - dormitans, *Guén.*
  B. Alæ anticæ ocello discali. - - Ophthalmica, *Guén.*
B. Alæ anticæ apud costam rectæ. - - Doubledayi, *Guén.*

1. Leptina dormitans.

Cinerea; alæ anticæ lineolis transversis subobsoletis angulosis albidis nigro marginatis maculaque costali subapicali nigricante; posticæ pallide cinereæ.

Leptina dormitans, *Guén. Noct.* i. 15, 7.

a—c. Trenton Falls, New York. Presented by E. Doubleday, Esq.

2. Leptina Ophthalmica.

Albida; alæ anticæ cinereæ, basi oblique albæ, apud costam exteriorem repande albidæ, striga obliqua apicali, guttis marginalibus, linea transversa angulosa ocelloque discali fuscis; posticæ canescentes.

Leptina ophthalmica, *Guén. Noct.* i. 15, 8.

a—c. New York. Presented by E. Doubleday, Esq.

3. Leptina Doubledayi.

Albida; alæ anticæ basi oblique albæ, vitta arcuata fusca, lineis duabus obliquis transversis albis, maculisque duabus discalibus nigricantibus.

Leptina Doubledayi, *Guén. Noct.* i. 15, 9.

a. Northern United States. Presented by E. Doubleday, Esq.

Genus 4. CORULA.

Mas. Corpus gracile. Proboscis breviuscula. Palpi brevissimi. Antennæ subpectinatæ, corporis dimidio longiores. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ vix latiusculæ; anticæ apud costam subconvexæ, apice subrotundatæ, margine exteriore mediocriter obliquo.

Male. Resembles the genus *Leptina*. Body slender. Proboscis rather short. Palpi very short. Antennæ slightly pectinated, more than half the length of the body. Abdomen extending as far as the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings slightly convex along the costa, somewhat rounded at the tips, moderately oblique along the exterior border; first and second inferior veins connected at the base; third hardly nearer to the second than to the fourth.

1. Corula geometroides.

Mas. *Cinerea; thorax fascia nigra, albido marginata; abdomen canum; alæ anticæ lineis tribus transversis nigris albido marginatis liturisque duabus (una discali, altera costali) nigris; posticæ albidæ, cinereo marginatæ.*

Male. Cinereous. Thorax with a black whitish-bordered band. Abdomen hoary. Fore wings with three transverse black lines, which have whitish borders; a black discal mark which is contiguous to the inner side of the second band, and a blackish mark on the costa between the second and third bands. Hind wings whitish, with cinereous borders. Length of the body 4 lines; of the wings 13 lines.

a, b. Sidney. From Mr. Lambert's collection.

Genus 5. CYMATOPHORA.

Corpus gracile. Proboscis mediocriter longa. Palpi porrecti, graciles, vix pilosi, caput perpaullo superantes; articulus 3us linearis, 2i dimidio brevior. Antennæ sat graciles, subserratæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latæ; anticæ apud costam subconvexæ, apice vix angulatæ, margine exteriore subobliquo.

Chymatophora, *Guénée, Ann. Soc. Ent. Fr.* vi. 315; *Noct.* i. 16.

Cymatophora, *Treit.; Boisd.; Steph.; Meig.; Herr.-Schæff.*
Kymatophora, *Treit. Suppl.*
Ceropacha, *Steph. Ill. Brit. Ent. Haust.* iii. 51. *Guénée, Ann. Soc. Ent. Fr.* vi. 314.
Tethea, *Ochs.*
Polyploca, Palimpsistis, Tethea, et Asphalia, *Hübn. Verz. Schmett.* 273.
Ceratopacha, *Steph. Cat. Brit. Lep.* 119.

Body slender. Proboscis moderately long. Palpi porrect, slender, hardly pilose, extending very little beyond the head; third joint linear, less than half the length of the second. Antennæ rather slender, very minutely serrated. Abdomen extending as far as the hind wings. Legs slender; hind tibiæ with four long spurs. Wings broad. Fore wings slightly convex in front, hardly angular at the tips, slightly oblique along the exterior border; first and second inferior veins nearly contiguous at the base; third not remote; fourth proceeding from the base of the wing.

Group 1.

1. Cymatophora duplaris.

Cinerea; abdomen pallidum; alæ anticæ lineis transversis undulatis fuscescentibus guttisque duabus discalibus nigris; posticæ pallidiores.

Phalæna-Pyralis duplaris, *Linn. Faun. Suec.* 1357. *Gmel. ed. Syst. Nat.* i. 5, 2526, 343. *Haw. Lep. Brit.* 274.
Bombyx binotata, *Fabr. Ent. Syst.* iii. 1, 486, 247.
Noctua bicolor, *Esp. Schmett.* iv. 70, pl. 197, f. 4.
Noctua bipuncta, *Bork. Eur. Schmett.* iv. 627, 264.
Noctua undosa, *Hübn. Eur. Schmett. Noct.* pl. 44, f. 211; *Larv. Lep.* iv. *Noct.* ii. *Gen.* P, d, f. 1.
Cymatophora bipuncta, *Treit. Schmett. Eur.* v. 1, 92, 8. *Dup. Hist. Nat. Lép. Fr.* iii. 71, 84, f. 1. *Guén. Ind.* 236. *Meig. Syst. Beschr. Eur. Schmett.* iii. 63, 5, pl. 90, f. 5. *Boisd. Ind. Méth.* 93, 702. *Herr.-Schæff. Eur. Schmett.* ii. 170, 8.
Tethea duplaris, *Hübn. Verz. Schmett.* 273, 2360.
Ceropacha duplaris, *Steph. Ill. Brit. Ent. Haust.* iii. 52, 2.
Ceratopacha duplaris, *Steph. Cat. Brit. Lep.* 108, 2. *Westw. & H. Brit. Moths*, i. 202, pl. 43, f. 2.
Cymatophora duplaris, *Guén. Hist. Nat. Noct.* i. 17. 10.
——— ———, *Engr. Pap. d'Eur.* 535.

a—j. England. From Mr. Stephens' collection.
k—m. England.
n—q. Europe. From M. Becker's collection.

2. Cymatophora fluctuosa.

Cinerea; abdomen canum; alæ anticæ lineis transversis undulatis obscurioribus et canis; posticæ nonnumquam albidæ, cinereo fasciatæ et marginatæ.

Noctua fluctuosa, *Hübn. Eur. Schmett. Noct.* pl. 44, f. 212. *Haw. Lep.* 273.
Ceropacha fluctuosa, *Steph. Ill. Brit. Haust.* iii. 51, 1. *Guén. Ess. Noct. Ann. Soc. Ent. Fr.* vi. 236.
Cymatophora fluctuosa, *Treit. Schmett. Eur.* v. 1, 94, 9. *Dup. Suppl.* iii. 162, pl. 15. *Meig. Syst. Beschr. Eur. Schmett.* iii. 63, 6, pl. 90, f. 5. *Guén. Noct.* i. 17, 11. *Herr.-Schæff. Eur. Schmett.* ii. 170, 7.
——— ———, *Engr. Pap. d'Eur.* 534.
Ceratopacha fluctuosa, *Steph. Cat. Brit. Moths*, 108, 1. *Westw. & H. Brit. Moths*, i. 202, pl. 43, f. 1.
Tethea fluctuosa, *Hübn. Verz. Schmett.* 273, 2361.

a—f. England. From Mr. Stephens' collection.
g, h. England.
i, j. Europe. From M. Becker's collection.

Group 2.

Corpus magis pilosum, plus robustum. Palpi crassiores, pilosi, ascendentes. Pedes vix graciles. Alæ mediocriter latæ.

Asphalia, *Hübn.*

Body stouter, more pilose. Palpi stouter, pilose, ascending. Antennæ rather stout. Legs hardly slender. Wings moderately broad.

3. Cymatophora ruficollis.

Cinerea; alæ anticæ cano variæ, annulis duobus incompletis liturisque posterioribus nigris, annulo interiore subovato, exteriore subquadrato; posticæ canæ, marginibus cinerascentibus.

Phalæna-Noctua ruficollis, *Gmel. ed. Syst. Nat.* i. 5, 2568, 1149.
Noctua ruficollis, *Wien. Verz.* 87, 7. *Fabr. Mant. Ins.* ii. 165, 204; *Ent. Syst.* iii. 2, 86, 255. *Bork. Eur. Schmett.* iv. 626, 263. *Hübn. Eur. Schmett. Noct.* pl. 43, f. 207. *Larv. Lep.* iv. *Noct.* ii. *Gen.* P. c. f. 1, a.

Cymatophora ruficollis, *Treit. Schmett. Eur.* v. 1, 89, 6. *Dup. Hist. Nat. Lép. Fr.* vi. 3, 168, pl. 83, f. 5. *Meig. Syst. Besch. Eur. Schmett.* iii. 84, 7, pl. 90, f. 7. *Boisd. Ind. Méth.* 99, 700. *Guén. Noct.* i. 18, 12. *Herr.-Schæff. Eur. Schmett.* ii. 169, 1.
Ceropacha ruficollis, *Guén. Ind.* 236.
Asphalia ruficollis, *Hübn. Verz. Schmett.* 238, 2363.
——— ———, *Engr. Pap. d'Eur.* pl. 358.
Europe.

4. Cymatophora diluta.

Cinerea; antennæ lutescentes; abdomen albidum; alæ punctis marginalibus nigris; anticæ fasciis duabus fuscis ex parte nigro marginatis; posticæ albidæ, fascia margineque latissimo fuscis.

Phalæna-Noctua diluta, *Gmel. ed. Syst. Nat.* i. 5, 2568, 1148.
Noctua diluta, *Wien. Verz.* 87, 6. *Fabr. Mant. Ins.* ii. 165, 203. *Ent. Syst.* iii. 2, 86, 254. *Esp. Schmett.* iv. pl. 128, f. 6. *Bork. Eur. Schmett.* iv. 624, 262. *Haw. Lep. Brit.* 270. *Hübn. Eur. Schmett. Noct.* pl. 43, f. 206; *Larv. Lep.* iv. *Noct.* ii. *Gen.* P, b, f. 1.
Bombyx undata, *Fabr. Ent. Syst.* iii. 1, 451, 136.
Asphalia diluta, *Hübn. Verz. Schmett.* 238, 2362.
Ceropacha diluta, *Steph. Ill. Brit. Haust.* iii. 52, 3. *Guén. Ind.* 13. *Boisd. Ind. Méth.* 93, 699.
Bombyx fasciculosa, *Bork. Eur. Schmett.* iii. 122.
Cymatophora diluta, *Treit. Schmett. Eur.* vi. 90, 7. *Dup. Hist. Nat. Lép. Fr.* vi. 3, 164, pl. 83, f. 4—6. *Meig. Handb.* 153, 13; *Syst. Besch. Eur. Schmett.* iii. 624, pl. 90, f. 4. *Boisd. Ind. Méth.* 699. *Herr.-Schæff. Eur. Schmett.* ii. 169, 4. *Guén. Noct.* i. 18, 3.
Ceratophacha diluta, *Steph. Cat. Brit. Lep.* 98, 3. *Westw. & H. Brit. Moths*, i. 203, pl. 43, f. 3, 4.

a. England (Bristol), Presented by J. N. Duck, Esq.
b. England. From Mr. Chant's collection.
c—o. England. From Mr. Stephens' collection.
p—t. England.
v. u. Europe. From M. Becker's collection.

5. Cymatophora Or.

Cinerea; alæ anticæ annulo discali lineis transversis fasciisque undulatis nigricantibus; posticæ subfasciatæ.

Phalæna-Noctua flavicornis, *Linn. Syst. Nat.* i. 2, 182; *Faun. Suec.* 1204. *Clerck, Icon.* pl. 6, f. 9. *Gmel. ed. Syst. Nat.* i. 5, 2575, 182.
Phalæna-Noctua Or, *Gmel. ed. Syst. Nat.* i. 5, 2568, 1147.
Noctua flavicornis, *Fabr. Sp. Ins.* ii. 238, 40; *Mant. Ins.* ii. 179, 284. *Wien. Verz.* 72, 6. *Haw. Lep. Brit.* 272.
Noctua Or, *Wien. Verz.* 5. *Fabr. Mant. Ins.* ii. 165, 200; *Ent. Syst.* iii. 2, 86, 253. *Sepp. Ins.* iv. pl. 42. *Hübn. Eur. Schmett. Noct.* pl. 43, f. 210; *Larv. Lep.* iii. *Noct.* ii. *Gen.* P, b, f. 2, P, a, b, f. 1, 87. *Frey. Neu. Beit. Schmett.* iv. pl. 333.
Noctua gemina, *Beckwith, Linn. Trans.* ii. 4, pl. 1, f. 4—6. *Donov. Brit. Ins.* x. 59, pl. 347, f. 3. *Stew. El. Nat. Hist.* ii. 196. *Turt. Syst. Nat.* iii. 324.
Noctua consobrina, *Bork. Eur. Schmett.* iv. 622, 261. *Scriba, Ins. Gesch.* pl. 6, f. 4, b.
——— ———, *Engr. Pap. d'Eur.* 533, a—c.
Ceropacha Or, *Steph. Ill. Bsit. Haust.* iii. 53, 4. *Guén. Ind.* 236.
Cymatophora Or, *Treit. Schmett. Eur.* v. 1, 98, 11. *Dup. Hist. Nat. Lép. Fr.* vi. 3, 161, pl. 82, f. 3. *Meig. Syst. Besch. Eur. Schmett.* iii. 61, pl. 90, f. 2. *Boisd. Ind. Méth.* 92, 697. *Herr.-Schæff. Eur. Schmett.* ii. 169, 5. *Guén. Noct.* i. 18, 14.
Palimpsestis Or, *Hübn. Verz. Schmett.* 273, 2358.
Ceratopacha Or, *Steph. Cat. Brit. Lep.* 108, 4.

e—m. England. From Mr. Stephens' collection.
n—q. England.
r, s. Europe. From M. Becker's collection.

6. Cymatophora ocularis.

Cinereo-fusca; antennæ fulvescentes; thorax fascia antica nigra; anticæ lineis transversis undulatis nigris, gutta interiore discali nigra, ocellis duobus discalibus albis connexis, exteriore coarctato; posticæ subcinereæ, fascia ciliisque albis.

Phalæna-Noctua ocularis, *Linn. Syst. Nat.* i. 2, 837.
Noctua octogena, *Esp. Schmett.* iv. pl. 184, f. 1, 2.
Noctua Or, *Bork. Eur. Schmett.* iv. 620, 260. *Scriba, Ins. Gesch.* i. pl. 6, f. 4, a.

Noctua octogesima, *Hübn. Eur. Schmett. Noct.* pl. 43, f. 209
——— ———, *Engr. Pap. d'Eur.* 532.
Tethea octogena, *Curt. Brit. Ent.* vi. pl. 272.
Cymatophora octogena, *Dup. Hist. Nat. Lép. Fr.* vi. 3, 158, pl. 83, f. 2.
Cymatophora octogesima, *Treit. Schmett. Eur.* v. 1, 95, 10. *Meig. Handb.* pl. 12, f. 6; *Syst. Besch. Eur. Schmett.* iii. 61, 1, pl. 90, f. 1. *Boisd. Ind. Méth.* 92, 696. *Herr.-Schæff. Eur. Schmett.* ii. 169, 6.
Ceropacha octogesima, *Steph. Ill. Brit. Ent. Haust.* iii. 53, 5, pl. 27, f. 2. *Guén. Ind.* 236.
Cymatophora ocularis, *Guén. Noct.* i. 19, 15.
Palempsestis octogesima, *Hübn. Verz. Schmett.* 273, 2357.
Ceratopacha ocularis, *Steph. Cat. Brit. Lep.* 109, 5.

a—c. England. From Mr. Stephens' collection.
d, e. Europe. From M. Becker's collection.
f. ———? From Mr. Milne's collection.

Group 3.

Corpus validum, pilosum. Palpi porrecti, caput sat superantes, articulo 3o longiore. Antennæ crassæ. Abdomen alas posticas paullo superans. Pedes validi. Alæ angustiores; anticæ apud marginem exteriorem sat obliquæ.

Palimpsestis, p., et Polyploca, *Hübn.*

Body stout, pilose. Palpi porrect, extending some distance beyond the head; third joint much longer than in the first and second groups. Antennæ very thick. Abdomen extending a little beyond the hind wings. Legs stout. Wings rather narrow. Fore wings rather oblique along the exterior border.

7. Cymatophora flavicornis.

Cinerea; antennæ luteæ; thorax fasciculis duabus posticis albidis; alæ anticæ lineis quatuor transversis undulatis nigris, duabus intermediis duplicatis, annulis duobus discalibus nigris; posticæ albidæ, cinereo fasciatæ et marginatæ.

Noctua flavicornis, *Esp. Schmett.* iv. pl. 184, f. 1, 2. *Scriba, Ins. Ges.* iii. pl. 13, f. 8. *Bork. Eur. Schmett.* iv. 616, 259. *Hübn. Eur. Schmett. Noct.* pl. 43, f. 208; *Larv. Lep.* iv. *Noct.* ii. *Gen.* P, e, f. 2; P, a, b, f. 2. *Donov. Nat. Hist. Brit. Ins.* x. 72.

Cymato flavicornis

——— ———, *Deg. Ins.* ii. 422, pl. 7. *Engr. Pap. d'Eur.* 359, a e.

Noctua luteicornis, *Haw. Lep. Brit.* 271.

Cymatophora flavicornis, *Treit. Schmett. Eur.* i. 100. *Meig. Handb.* 153, 14; *Syst. Besch. Eur. Schmett.* iii. 62, 3, pl. 90, f. 3. *Duponch. Hist. Nat. Lép. Fr.* vi. 3, 54, pl. 83, 11. *Frey. Neu. Ges. Ins.* iv. pl. 375. *Boisd. Ind. Méth.* 92, 698. *Herr.-Schæff. Eur. Schmett.* ii. 169, 2. *Guén. Noct.* i. 19, 16.

Ceropacha flavicornis, *Steph. Ill. Brit. Ent. Haust.* iii. 54, 6. *Guén. Ind.* 236.

Palimpsestis flavicornis, *Hübn. Verz. Schmett.* 2359.

Ceratopacha flavicornis, *Steph. Cat. Brit. Lep.* 109, 6. *Westw. & H. Brit. Moths*, i. 203, pl. 43, f. 7, 8.

e—h. England. From Mr. Stephens' collection.

i—o. England.

p—w. Europe. From M. Becker's collection.

8. Cymatophora ridens.

Viridescens; antennæ fulvæ; abdomen albidum; alæ anticæ lineis transversis undulosis annulisque duobus discalibus nigris; posticæ albidæ marginibus fuscescentibus.

Noctua ridens, *Fabr. Mant. Ins.* ii. 180, 289. *Ent. Syst.* iii. 1, 119. *Haw. Lep. Brit.* 117.

Phalæna-Noctua ridens, *Gmel. ed. Syst. Nat.* i. 5, 2569, 1152.

Phalæna-Noctua chrysoceras, *Beck, Trans. Linn. Soc.* ii. 3, pl. 1. *Stew. El. Nat. Hist.* ii. 195.

Noctua flavicornis, *Wien. Verz.* 72.

Noctua putris, *Rottem, Naturf.* viii. 44, 108.

Noctua erythrocephala, *Esp. Schmett.* iv. 309, pl. 121, f. 1—3.

Noctua xanthoceros, *Bork. Eur. Schmett.* 117. *Hübn. Noct.* pl. 43, f. 205. *Treit. Schmett. Eur.* i. 86.

Cymatophora ridens, *Dup. Hist. Nat. Lép. Fr.* iii. 151, pl. 82, f. 5, 6. *Boisd. Ind. Méth.* 92, 695. *Herr-Schæff. Eur. Schmett.* ii. 169, 3. *Guén. Noct.* i. 20, 17.

Ceropacha ridens, *Steph. Ill. Brit. Ent. Haust.* iii. 55, 7. *Guén. Ind.* 236.

——— ———, *Engr. Pap. d'Eur.* pl. 291, f. a—d.

Polyploca xanthoceros, *Hübn. Verz. Schmett.* 273, 2356.

Ceratopacha ridens, *Steph. Cat. Brit. Lep.* 120, 7. *Westw. & H. Brit. Moths*, i. 205, pl. 43, f. 9, 10.

e—m. England. From Mr. Stephens' collection.

n—r. England.
s, *t*. Europe. From M. Becker's collection.
v. France.

North America.

9. Cymatophora caniplaga.

Mas. *Cinerea, sat robusta; caput et thorax anticus fusca; palpi capite breviores; antennæ subpectinatæ; abdomen subcervinum; alæ anticæ fascia basali plagaque oblonga discali albidis, lineis nonnullis transversis undulatis subinterruptis, litura transversa discali guttisque submarginalibus nigris; posticæ fusco-cinereæ, basi pallidiores, litura discali obscuriore.*

Male. Gray, rather stout. Head and fore part of the thorax brown, the former dark brown in front. Palpi short, not extending so far as the head; third joint very short. Antennæ slightly pectinated, whitish at the base. Abdomen somewhat fawn-colour. Fore wings with a whitish band near the base, and a whitish oblong patch in the disk, with some transverse undulating partly interrupted blackish lines, with a transverse discal blackish mark, and with a row of submarginal blackish dots. Hind wings brownish cinereous, paler towards the base, and with a darker discal mark. Length of the body 7 lines; of the wings 18 lines.

This species has much resemblance to *C. flavicornis*, but forms a distinct group in the genus.

Canada. In Mr. Saunders' collection.

Fam. 2. BRYOPHILIDÆ.

Corpus gracile. Proboscis breviuscula. Palpi ascendentes, caput paullo superantes; articulus 3us truncatus aut acuminatus. Antennæ graciles, simplices. Abdomen alas posticas vix superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apice vix angulatæ, margine exteriore subobliquo.

Bryophagidi, *Guén. Ann. Soc. Ent. Fr.* vi. 322. *Steph. Cat. Brit. Lep.* 118.
Bryophilidæ, *Guén. Noct.* i. 21.
Bombycoides Jaspidiæ, *Hübn. Verz. Schmett.*
Bombycoides, p., *Boisd. Ind. Méth.* 94. *Duponch.*
Bombycoidæ, p., *Herr.-Schæff. Eur. Schmett.* ii. 173.

Body slender. Proboscis rather short. Palpi ascending, extending a little beyond the head; third joint truncate or acuminated. Antennæ slender, simple. Abdomen hardly extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings hardly angular at the tips, slightly oblique along the exterior border.

A. Palpi articulo 3o acuminato. - - - Bryophila, *Treit.*
B. Palpi articulo 3o truncato. - - Grammophora, *Guén.*

Genus 1. BRYOPHILA.

Corpus gracile. Proboscis breviuscula. Palpi ascendentes, caput paullo superantes; articulus 3us lanceolatus, 2i dimidio longior. Antennæ graciles, simplices. Abdomen alas posticas vix superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apice vix angulatæ, margine exteriore subobliquo.

Bryophila, *Treit. Schmett. Eur.* i. 57. *Boisd. Ind. Méth.* 96. *Steph. Ill. Brit. Ent. Haust. Herr.-Schæff. Eur. Schmett.* ii. 185. *Guénée, Ann. Soc. Ent. Fr.* vi. 324; *Noct.* i. 22.
Pœcilia, *Schrank; Ochs.*
Pœcilia, Metachrostis, Euthales et Cryphia, *Hübn. Verz. Schmett.*
Cryphia, *Hübn. Samml. Exot. Schmett.* i. 14.
Acronyctia, p., *Meigen.*

Body slender. Proboscis rather short. Palpi ascending, rising a little above the head; third joint lanceolate, more than half the length of the second. Antennæ slender, simple. Abdomen hardly extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, hardly angular at the tips, slightly oblique along the exterior border; first and second inferior veins almost contiguous at the base; third hardly remote; fourth proceeding from the base of the wing.

Europe.

A. Alæ anticæ albæ, nigricante aut cinereo marmoratæ.
  A. Alæ anticæ fascia basali nigra completa. glandifera, *W. V.*
  B. Alæ anticæ fascia basali postice abbreviata.
    A. Palpi minus arcuati et ascendentes. - Perla, *W. V.*
    B. Palpi plus arcuati et ascendentes. - Perloides, *Guén.*

B. Alæ anticæ cinereæ aut fuscescentes.
A. Alæ anticæ fasciis distinctis albis.
A. Alæ anticæ fasciis nigro punctatis.
a. Major, obscurior, crassior; palpi breviores. eriptricula, *Treit.*
b. Minor, pallidior, gracilior; palpi longiores. Vandalusiæ, *Dup.*
B. Alæ anticæ fasciis nigro maculatis. - - Algæ, *Fabr.*
B. Alæ anticæ fasciis nullis albis.
A. Alæ anticæ striga exteriore nulla nigra.
a. Alæ anticæ maculis nullis exterioribus albidis.
i. Alæ anticæ subferruginosæ. - - - ravula, *Hübn.*
ii. Alæ anticæ non rufescentes. - - troglodyta, *Frey.*
b. Alæ anticæ macula exteriore postica albida. deceptricula, *Hübn.*
B. Alæ anticæ striga exteriore nigra.
a. Alæ anticæ fascia exteriore minus arcuata. recepticula, *Hübn.*
b. Alæ anticæ fascia exteriore plus arcuata.
i. Palpi minus ascendentes.
* Alæ anticæ breviores, apice plus acuminatæ. fraudatricula, *Hübn.*
** Alæ anticæ longiores, apice minus acuminatæ. simulatricula, *Guén.*
ii. Palpi plus ascendentes. - - - - petrea, *Guén.*

1. Bryophila ravula.

Cana; caput, thorax et alæ anticæ nigro confertim punctata; alæ anticæ cervino variæ, lineis transversis undulatis guttisque paucis nigricantibus; posticæ apud margines subcinereæ.

Var. *Nigro-cinerea; abdomen et alæ posticæ cana; alæ anticæ fascia subobsoleta margineque exteriore pallidioribus, annulis duobus connexis lineisque undulatis transversis nigricantibus.*

Noctua ravula, *Hübn. Eur. Schmett. Noct.* 461.
Bryophila lupulo, *Dup. Hist. Nat. Lép. Fr.* vii. 367, pl. 122, f. 6; *Suppl.* iv. 222, pl. 69. *Guén. Ann. Soc. Ent. Fr.* 1833, 197; *Ess.* 236.
Bryophila rapticula, *Boisd. Ind. Méth.* 97, 736.
Bryophila perla, *Boisd. Ramb. et Grasl. Icon. Chen.*
Bryophila ravula, *Herr.-Schæff. Eur. Schmett.* ii. 186, 26. *Guén. Noct.* i. 23, 18.

a—f. Europe. From M. Becker's collection.

Bryophilidae

2. Bryophila Vandalusiæ.

B. ereptriculæ *minor, gracilior, pallidior; palpi longiores, magis securiformes.*

Bryophila Vandalusiæ, *Duponch. Suppl. Hist. Nat. Lép. Fr.* iv. 405, pl. 82. *Guén. Noct.* i. 24, 19.
B. ereptriculæ, *var.?*

Andalusia.

3. Bryophila ereptricula.

Fusco-cinerea; abdomen et alæ posticæ cana; alæ anticæ lineis transversis undulatis nigricantibus, fasciis duabus (exteriore interrupta) liturisque intermediis albidis.

Bryophila ereptricula, *Treit. Schmett. Eur.* v. 66, 5. *Dup. Hist. Nat. Lép. Fr.* vii. 239, pl. 115, f. 4. *Geyer, Eur. Schmett.* 863. *Boisd. Icon.* pl. 71; *Ind. Méth.* 96, 732. *Guén. Ann. Soc. Ent. Fr.* 325, 236; *Noct.* i. 24, 20. *Frey. Neu. Beitr. Schmett.* i. pl. 52, f. 2; *Beitr. Gesch.* pl. 84, f. 1, 2; pl. 129. *Herr.-Schæff. Eur. Schmett.* ii. 186, 27.
Noctua spoliatricula? *Hübn. Eur. Schmett. Noct.* pl. 6, f. 26.
Acronyctia ereptricula, *Meig. Syst. Besch. Eur. Schmett.* iii. 77, 22, pl. 92, f 5.

Europe.

4. Bryophila troglodyta.

B. ereptriculæ *paullo major; abdomen et alæ posticæ obscuriora; alæ anticæ saturate fusco-nigræ, nunquam rufescentes.*

Bryophila ereptricula, var., *Treit. Suppl.* x. 12. *Boisd. Ind. Méth.* 96.
Bryophila troglodyta, *Frey. Neu. Beitr. Schmett.* i. 102. *Guén. Noct.* i. 24, 21.

Prussia.

5. Bryophila petrea.

Palpi valde ascendentes, articulo 3o sat longo; alæ anticæ viridi-fusco cinereo nigroque nebulosæ, maculis duabus discalibus nigris, una rotunda, altera reniformi fulvo-cano varia; posticæ aurato cinereo-fulvæ.

Bryophila petrea, *Guén. Noct.* i. 25, 22.

Andalusia.

6. Bryophila deceptricula.

Cinerea; abdomen sordide canescens; alæ anticæ strigulis variis transversis nigris, plaga basim versus albida, macula postica exteriore alba, fascia diffusa nigricante; posticæ pallide cinerascentes.

——— ———, *Engr. Pap. d'Eur.* 316, a, b.

Noctua deceptricula, *Hübn. Samml. Eur. Schmett.* 30. *Treit. Schmett. Eur.* i. 72. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 539, pl. 45, f. 5, a. *Frey. Neu. Beit. Schmett.* ii. pl. 179. *Guén. Ann. Soc. Ent. Fr.* vi. 236; *Noct.* i. 25, 23.

Noctua divisa, *Esp. Schmett.* pl. 158, f. 5, 6.

Var. β. *Murina; abdomen murino-albidum; alæ anticæ subnebulosæ, lineis duabus flexuosis annulisque duobus intermediis nigricantibus; posticæ albidæ, margine subcinereo.*

Noctua raptricula, *Hübn. Eur. Schmett. Noct.* pl. 6, f. 29.

Bryophila raptricula, *Treit. Schmett. Eur.* v. 1, 71, 8.

Bryophila deceptricula, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 539. pl. 45, f. 5, b. *Frey. Neu. Beit. Schmett.* ii. pl. 179, f. 1, *Herr.-Schæff. Eur. Schmett.* ii. 187, *var.*

Noctua pomula, *Bork. Eur. Schmett.* iv. 183, 79.

Euthales raptricula, *Hübn. Verz. Schmett.* 205, 2064.

——— ———, *Engr. Pap. d'Eur.* 317, a—c.

Acronyctia raptricula, *Meig. Syst. Besch. Eur. Schmett.* iii. 76, 20, pl. 92, f. 4.

a—c. Europe. From M. Becker's collection.

7. Bryophila simulatricula.

B. fraudatriculæ *affinis; alæ anticæ viridi-cinerascentes plus elongatæ, apice minus acutæ; posticæ albidæ, apud marginem exteriorem nigricantes, lunula discali nigra; palpi validi, ascendentes; articulo 3o longo.*

Bryophila simulatricula, *Guén. Noct.* i. 26, 24.

Florence?

8. Bryophila fraudatricula.

Nigro-cinerea; abdomen cinerascens; alæ anticæ lineis tribus transversis undulosis nigris cano marginatis, annulis duobus discalibus lineisque exterioribus nigris; posticæ cinerascentes.

Noctua palliola, *Bork. Eur. Schmett.* iv. 184, 80.
Noctua fraudatricula, *Hübn. Eur. Schmett. Noct.* pl. 6, f. 28. *Treit. Schmett. Eur.* vi. 70, 7; *Suppl.* x. 15. *Frey. Neu. Beit. Schmett.* ii. pl. 170.
Bryophila fraudatricula, *Boisd. Icon.* pl. 71; *Ind. Méth.* 96, 734. *Herr.-Schæff. Eur. Schmett.* ii. 186, 30. *Guén. Ann. Soc. Ent. Fr.* 236; *Noct.* i. 26, 25.
Acronyctia fraudatricula, *Meig. Syst. Besch. Eur. Schmett.* iii. 76. 21, pl. 92, f. 3.
Euthales fraudatricula, *Hübn. Verz. Schmett.* 205, 2063.

a—c. Europe. From M. Becker's collection.

9. Bryophila receptricula.

Nigro-cinerea; abdomen cinereum; alæ anticæ lineis transversis flexuosis ex maxima parte interruptis strigisque exterioribus nigris; posticæ cinerascentes.

Noctua receptricula, *Hübn. Eur. Schmett.* 27. *Treit. Schmett. Eur.* i. 66. *Frey. Neu. Beit. Schmett.* pl. 179.
Noctua strigula, *Bork. Eur. Schmett.* 78.
Noctua degener, *var.*, *Esp. Schmett.* pl. 158, f. 4.
——— ———, *Engr. Pap. d'Eur.* 318, a—c.
Bryophila receptricula, *Boisd. Ind. Méth.* 96, 733. *Herr.-Schæff. Eur. Schmett.* ii. 186, 29. *Guén. Noct.* i. 27, 27.
Bryophila Algæ, *var.? Guén. Ann. Soc. Ent. Fr.* 236.
Cryphia receptricula, *Hübn. Verz. Schmett.* 205, 2066.

a, b. Europe. From M. Becker's collection.

10. Bryophila Algæ.

Viridi-albida; thorax nigro bivittatus; abdomen sordide albidum; alæ anticæ viridi-fuscæ, basi plagisque paucis albidis, strigis guttis maculis costalibus lineisque transversis undulosis nigris; posticæ cinerascentes, basi costaque albidis.

Noctua Algæ, *Fabr. Sp. Ins.* ii. 235, 128; *Mant. Ins.* ii. 173, 253; *Ent. Syst.* iii. 2, 104, 313. *Scriba, Ins. Gesch.* pl. 10, f. 6. *Dup. Hist. Nat. Lép. Fr.* iii. 212, pl. 86.

Phalæna-Noctua Algæ, *Gmel. ed. Syst. Nat.* i. 5, 2563, 1129.
Noctua degener, *Bork. Eur. Schmett.* iv. 170, 69.
Noctua degener? *Wien. Verz. E.* 4.
Noctua spoliatricula, *Treit. Schmett. Eur.* v. 1, 64, 4. *Frey. Neu. Beit. Schmett.* ii. pl. 179, f. 4.
Noctua spoliatricula? *Hübn. Eur. Schmett. Noct.* pl. 5, f. 26; *Larv. Lep.* iv. *Bomb.* C, c. f. 1, a.
——— ———, *Engr. Pap. d'Eur.* 324.
Bryophila Algæ, *Boisd. Ind. Méth.* 96, 729. *Guénée, Ann. Soc. Ent. Fr.* vi. 123; *Noct.* i. 27, 28. *Herr.-Schæff. Eur. Schmett.* ii. 186, 28.
Acronyctia spoliatricula, *Meig. Syst. Besch. Eur. Schmett.* iii. 75, 19, pl. 22, f. 2.
Euthales spoliatricula, *Hübn. Verz. Schmett.* 205, 2061.
Noctua strigula, *Duponch. Hist. Nat. Lép. Fr.* iii. 215, pl. 86.
Noctua degener, *Esp. Eur. Schmett.* iv. pl. 158, f. 3.
Var. Noctua mendacula, *Hübn. Eur. Schmett. Noct.* pl. 520.
Bryophila mendacula, *Boisd. Ind. Méth.* 96, 730; *Dup. Cat.*
Euthales mendacula, *Hübn. Verz. Schmett.* 205, 2065.
Noctua chloris? *Bork. Eur. Schmett.* 71.
Var. Noctua calligrapha, *Bork. Eur. Schmett.* iv. 173, 71. *Hübn. Eur. Schmett. Noct.* pl. 530.
Bryophila calligrapha, *Boisd. Ind. Méth.* 96, 731. *Dup. Cat.*
Euthales calligrapha, *Hübn. Verz. Schmett.* 205, 2062.

a, *b*. Europe. From M. Becker's collection.

11. Bryophila Perla.

Alba; alæ anticæ strigis costalibus, litura basali, maculis duabus discalibus, lineis transversis undulatis guttisque exterioribus nigris, margine cinerascente; posticæ fascia margineque cinerascentibus.

Noctua Perla, *Wien. Verz.* 70, 3. *Fabr. Mant. Ins.* ii. 173, 251; *Ent. Syst.* iii. 2, 104, 310. *Esp. Eur. Schmett.* pl. 77, f. 2. *Haw. Lep. Brit.* 119, 203. *Hübn. Eur. Schmett. Noct.* pl. 5, f. 25.
Phalæna-Noctua Perla, *Gmel. ed. Syst. Nat.* i. 5, 2563, 1127.
Noctua glandifera, *Bork. Eur. Schmett.* iv. 128, 52.
Noctua lithophila, *Scriba, Ins. Gesch.* iii. 262, pl. 18.
——— ———, *Engr. Pap. d'Eur.* 321, a—d.
Metachrostis Perla, *Hübn. Verz. Schmett.* 204, 2057.

Bryophila perla, *Treit. Schmett. Eur.* v. 1, 61, 3; *Suppl. Dup. Hist. Nat. Lép. Fr.* vi. 210, pl. 86, f. 4. *Steph. Ill. Brit. Ent. Haust.* iii. 45, 2; *Cat. Brit. Lep.* 107, 2. *Frey. Neu. Beit. Schmett.* i. pl. 70. *Guén. Ann. Soc. Ent. Fr.* iii. 195; 1835, 123; *Noct.* i. 28. *Boisd. Ind. Méth.* 96, 726. *Westw. and Humph. Brit. Moths*, i. 199, pl. 41, f. 10. *Herr.-Schæff. Eur. Schmett.* ii. 185, 24.

Bryophila raptricula, *Boisd. Ramb. et Grasl. Icon. Chen.*

Acronyctia Perla, *Meig. Syst. Besch. Eur. Schmett.* iii. 75, 18, pl. 91, f. 11.

c—ee. England. From Mr. Stephens' collection.

dd—hh. England.

ii, jj. Europe. From M. Becker's collection.

12. Bryophila Perloides.

B. Perla *paullo major; palpi magis ascendentes et arcuati; alæ anticæ magis oblongæ et apice elongatæ, flavescente aut viridi-cinereo conspersæ.*

Bryophila perloides, *Guén. Noct.* i. 29, 30.

Structure of *B. Perla*; markings like those of *B. glandifera*, var. *Par.*

Andalusia.

13. Bryophila glandifera.

Alba; palpi et thorax nigro maculati; alæ anticæ fasciis duabus cinereis, margine subcinerascente, strigis costalibus, guttis marginalibus, annulis duobus connexis discalibus lineisque transversis angulosis nigris; posticæ fasciis duabus exterioribus cinerascentibus.

——— ———, *Engr. Pap. d'Eur.* pl. 332, a—d.

Noctua glandifera, *Wien. Verz.* 70, 2. *Hübn. Eur. Schmett. Noct.* pl. 5, f. 24; *Larv. Lep.* iv. *Noct.* i. *Bomb.* C, c, f. 2. *Frey. Neu. Beitr. Schmett.* i. pl. 70.

Noctua Lichenis, *Fabr. Sp. Ins.* ii. 235, 127; *Mant. Ins.* ii. 173, 252; *Ent. Syst.* iii. 4, 104, 312. *Esp. Schmett.* iv. pl. 118, f. 8. *Bork. Eur. Schmett.* iv. 130, 53. *Haw. Lep. Brit.* 118, 203.

Phalæna-Noctua Lichenis, *Gmel. ed. Syst. Nat.* i. 5, 2563, 1128. *Stew. El. Nat. Hist.* ii. 188. *Turt. Syst. Nat.* iii. 330. *Donov. Nat. Hist. Brit. Ins.* vii. pl. 223, f. 3.

Bryophila glandifera, *Treit. Schmett. Eur.* vi. 58, 1; *Suppl.* *Ind. Méth.* 96, 725. *Guén. Ess.* 236; *Noct.* i. 29, 31. *Ill. Brit. Ent. Haust.* iii. 44, 1; *Cat. Brit. Lep.* 107, *Westw. & Humph. Brit. Moths*, i. 199, pl. 41, f. 10. *Schæff. Eur. Schmett.* ii. 185, 25.
Bryophila Lichenis, *Dup. Hist. Nat. Lép. Fr.* vi. 207, pl. 86, f. 1-
Pœcilia glandifera, *Hübn. Verz. Schmett.* 204, 2055.
Acronyctia glandifera, *Meig. Syst. Besch. Eur. Schmett.* iii. 74, pl. 91, f. 10.

Var. *Alæ anticæ viridi-cinerea, lineis obscurioribus albido mar natis, guttis costalibus nigris; posticæ fuscescentes fu tenui obscuriore, basi albidæ.*

Noctua par, *Hübn. Eur. Schmett. Noct.* pl. 515.
Bryophila par, *Treit. Schmett. Eur.* i. 60; *Suppl.*
Metachrostis par, *Hübn. Verz. Schmett.* 204, 2056.

a. England (Devonshire). Presented by W. R. H. Jordan, Esq.
b—o. England. From Mr. Stephens' collection
q—u. England.
w—ee. Europe. From M. Becker's collection.
ff. France.
gg. ——? From Mr. Milne's collection.

North America.

14. Bryophila nana.

Mas. *Obscure fusca; alæ anticæ strigis transversis irregulari apicebusque cano-cinereis; posticæ marginibus pallide fu*

Cryphia nana (Noctua bombycoides, Jaspidia nubila), *Hübn. Zi Samml. Exot. Schmett.* i. 14, 27, f. 53, 54; *Verz. Schm* 205, 2067.

Georgia, Florida.

15. Bryophila palliatricula.

Cinereo-fusca; alæ anticæ plaga maxima discali alba macula parva subcostali fusca; posticæ pallidæ cinereæ.

Bryophila palliatricula, *Guén. Noct.* i. 26, 26.

a, b. New York. Presented by E. Doubleday, Esq.

16. Bryophila teratophora.

Ferrugineo-fusca; abdomen cinereum; alæ anticæ lineis transversis nigris, plaga discali maculisque duabus approximatis albidis; posticæ cinereæ, macula discali fasciisque duabus obscurioribus.

Bryophila teratophora, *Herr.-Schæff. Lep. Exot.* f. 213.

Tennesse.

17. Bryophila corticosa.

B. glandiferæ *magnitudine; corpus sat robustum; antennæ longæ; abdomen subtus album; alæ anticæ validæ, squamosæ, albo-viridi nigro fuscoque variæ, lineis maculaque apud marginem internum nigris, ciliis albis nigro signatis; posticæ albæ, margaritaceæ, plaga apud angulum internum nigricante.*

Bryophila corticosa, *Guén. Noct.* i. 30, 32.

North America.

18. Bryophila discitincta.

Fusco-cinerea; thorax fascia cana; abdomen pallide cinereum; alæ anticæ fasciis angustis undulatis canis fusco marginatis, disco ex parte fusco, macula discali obliqua cana; posticæ pallide cinereæ.

Brownish cinereous. Thorax with a hoary band. Abdomen and hind wings pale cinereous. Fore wings with slender undulating hoary bands, which have brown borders, and with an oblique hoary spot in the disk, which is partly brownish. Length of the body 6 lines; of the wings 14 lines.

St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

19. Bryophila discivaria.

Pallide cinerea; alæ anticæ obscuriores, plaga postica, fasciis angustis maculaque discali reniformi albidis.

Var. β. *Alæ anticæ cinereæ, fere unicolores, maculis fasciisque subobsoletis.*

Pale cinereous. Fore wings darker, mostly whitish about the basal half of the interior border, with slender undulating whitish bands, and with a whitish discal spot, which is contracted in the middle. Length of the body 5—6 lines; of the wings 12—14 lines.

Var. β. Fore wings cinereous, almost of one colour, the bands and the spots being nearly obsolete.

a, b. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

20. Bryophila discinigra.

Cinerea; thorax fasciis nigricantibus; alæ anticæ nigricantes, basi et apud marginem exteriorem canæ, necnon cano signatæ et bimaculatæ; posticæ canæ.

Cinereous. Thorax with blackish bands. Fore wings blackish, hoary at the base and along the exterior border; some intermediate marks and two discal spots also hoary, the outer spot curved, larger than the other. Hind wings hoary. Length of the body 6½ lines; of the wings 15 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

Genus 2. GRAMMOPHORA.

Corpus gracile aut sat gracile. Proboscis breviuscula. Palpi porrecti, caput paullo superantes; articulus 3us longi-conicus. Antennæ simplices, corporis dimidio non longiores. Abdomen alas posticas perpaullo superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore subobliquo.

Grammophora, *Guén. Noct.* i. 30.
Polygrammate et Cerma, *Hübn. Samml. Exot. Schmett.; Verz; Schmett.* 203, 207.

Body slender or rather slender. Proboscis rather short. Palpi porrect, extending a little beyond the head; third joint elongate-conical. Antennæ simple, about half the length of the body. Abdomen extending very little beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings rather broad. Fore wings nearly straight in front, rounded at the tips, slightly oblique along the exterior border.

1. Grammophora hebræa.

Albida; abdomen pallide fuscum; alæ anticæ strigis undulatis guttisque nigris; postica pallide fuscæ, marginibus latis obscurioribus.

Polygrammate hebraicum (Noctua bombycoides, Diphthera vilis), *Hübn. Samml. Exot. Schmett.* i. 10, 13, f. 25, 26; *Verz. Schmett.* 203, 2052.

Grammophora hebræa, *Guén. Noct.* i. 31, 33.

Georgia, Florida.

c. ——?

2. Grammophora Cora.

Cinerea; alæ anticæ fuscæ, basi fasciaque media latissima albidis lineolis angulosis ocellisque nigris inscriptis, apices versus lineolis transversis angulosis nigris guttulisque albis; posticæ macula discali marginibusque latis nigricantibus.

Cerma Cora (Noctua genuina, Miselia distincta), *Hübn. Samml. Exot. Schmett.* i. 14, 30, f. 59, 60; *Verz. Schmett.* 207, 2073.

Grammophora Cora, *Guén. Noct.* i. 31, 34.

Georgia, Florida.

a, b. North America. From Mr. Milne's collection.

c. ——?

3. Grammophora trisignata.

Albida; alæ anticæ albæ, guttis nonnullis lineisque plurimis transversis angulosis nigris ocelloque discali signatæ, maculis tribus rotundis cervinis ornatæ; posticæ fusco-cinereæ, basi albidæ.

Whitish. Fore wings white, thinly sprinkled with black dots, and adorned with many transverse angular black lines; also with three round fawn-coloured spots, one spot on the costa near the base, the second near the tip of the costa, the third above the interior angle and near the exterior border; a black incomplete ocellus in the disk. Hind wings brownish cinereous, whitish at the base, and with whitish borders, the latter with lunate brown marks. Length of the body 5½ lines; of the wings 14 lines.

a, b. Orilla, West Canada. From Mr. Bush's collection.

Fam. 3. BOMBYCOIDÆ.

Corpus robustum aut gracile. Proboscis longa aut nu
Palpi nonnunquam ascendentes; articulus 3us minimus aut elo
tus. Antennæ simplices, *maris* rarissime pectinatæ. Pedes sæp
sime validi; tibiæ posticæ calcaribus quatuor longis. Alæ l
aut latiusculæ, rarissime elongatæ.

Bombycoides, p. et Caradrinides, p., *Boisd. Ind. Méth.* 94.
Bombycoidæ, *Guén. Noct.* i. 33.
Bombycoides Apatelæ et Diphtheræ, *Hübn. Verz. Schmett*
Bombycoidi, *Boisd. Ind Méth.* ed. 1, 60. *Steph. Cat. Brit. L*
114.
Bombycoidæ, p., et Liparides, p., *Herr.-Schæff. Eur. Schmett.*
130, 173.

Body stout, rather slender in some species. Proboscis lo
occasionally very short or obsolete. Palpi sometimes ascendi
third joint rarely elongated. Antennæ of the male very rarely p
tinated. Abdomen generally extending a little beyond the h
wings. Legs somewhat stout; hind tibiæ with four long sp
Wings broad or rather broad, very rarely narrow and elongated.

A. Abdomen apice tantum villosum. - 1. MICROCŒLIA, *Gu*
B. Abdomen villosum.
A. Proboscis brevis. - - - - 2. DIPHTERA, *Od*
B. Proboscis longa. - - - 3. ACRONYCTA, *Od*
C. Proboscis nulla aut subobsoleta. - - 4. SIMYRA, *Od*

Genus 1. MICROCŒLIA.

Corpus gracile. Proboscis breviuscula. Palpi sat gracil
oblique ascendentes, caput paullo superantes; articulus 3us lanc
latus, 2i dimidio brevior. Antennæ simplices, graciles, corp
dimidio non longiores. Abdomen alas posticas vix super
Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. A
latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, marg
exteriore subobliquo.

Microcœlia, *Guén. Noct.* i. 3.

Body slender. Proboscis rather short. Palpi rather slend
obliquely ascending, extending a little beyond the head; third jo
lanceolate, less than half the length of the second. Anten

simple, slender, about half the length of the body. Abdomen hardly extending beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather broad. Fore wings almost straight in front, rounded at the tips, slightly oblique along the exterior border.

1. Microcœlia fragilis.

Albida; caput et thorax nigro fasciata; alæ anticæ apud discum subfuscescentes, lineis transversis angulosis, guttis marginalibus, macula postica annulisque duobus discalibus nigris.

Microcœlia fragilis, *Guén. Noct.* i. 34, 35.

a. New York. Presented by E. Doubleday, Esq.

2. Microcœlia diphteroides.

Albida; alæ anticæ lineis transversis angulosis interruptis, maculis costalibus, guttis marginalibus maculaque subquadrata discali nigris.

Var. β. *Alæ anticæ lineis guttisque obsoletis.*

Microcœlia diphteroides, *Guén. Noct.* i. 34, 36.

c—d. Trenton Falls, New York. Presented by E. Doubleday Esq.

Genus 2. DIPHTERA.

Corpus plus minusve robustum aut sat gracile. Proboscis brevis aut breviuscula. Palpi nonnunquam ascendentes; articulus 3us brevissimus aut elongatus. Antennæ *maris* nonnunquam pectinatæ. Abdomen alas posticas non aut paullo superans. Pedes validi, aut aut validi; tibiæ posticæ calcaribus quatuor longis aut longiusculis. Alæ anticæ latiusculæ aut sat angustæ, margine exteriore subobliquo aut sat obliquo.

Diphtera, *Ochs.*; *Treit.*; *Boisd.*; *Guén.*; *Steph.*
Moma, p., Pœcilia, p., et Panthea, *Hübn. Verz. Schmett.* 203, 204.
Diphtera et Elatina, *Duponch.*
Moma, Diphthera, et Lælia, *Herr.-Schæff. Eur. Schmett.* ii. 175, 176.

Body more or less stout or rather slender. Proboscis short or rather short. Palpi ascending or horizontal; third joint elongated

or very short. Antennæ simple or slightly pectinated in the male. Abdomen extending as far as the hind wings or a little beyond. Legs stout or rather stout; hind tibiæ with four long or rather long spurs. Wings not or rather broad, somewhat long in one species.

Europe.

Group 1.

Corpus vix robustum. Proboscis breviuscula. Palpi oblique ascendentes; articulus 3us minutus, brevis, conicus. Antennæ simplices, sat validæ. Abdomen alas posticas non superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apice subrotundatæ, margine exteriore subobliquo.

Moma, p., *Hübn.*
Diphthera, *Herr.-Schæff.*

Body hardly stout. Proboscis rather short. Palpi obliquely ascending; third joint minute, conical, not one-fourth of the length of the second. Antennæ simple, moderately stout. Abdomen extending as far as the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings rather broad. Fore wings almost straight in front, somewhat rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins almost contiguous at the base; fourth moderately remote.

1. Diphtera ludifica.

Alba; thorax nigro trifasciatus; abdomen luteum, maculis dorsalibus et lateralibus apiceque nigris albo-cinctis; alæ anticæ lineis transversis interruptis angulosis annuloque discali nigris; posticæ cinereæ, antice albidæ, margine interiore lutescente, guttis marginalibus nigris.

Phalæna-Noctua ludifica, *Linn. Syst. Nat.* i. 2, 848, 143; *Faun. Suec.* 1177. *Gmel. ed. Syst. Nat.* i. 5, 2562, 143. *Turt. Syst. Nat.* iii. 329.

——— ———, *Engr. Pap. d'Eur.* pl. 323.

Noctua ludifica, *Wien. Verz.* 311, 8. *Fabr. Sp. Ins.* ii. 235, 126; *Mant. Ins.* ii. 173, 249; *Ent. Syst.* iii. 2, 103, 309. *Naturf.* 1780, pl. 3, f. A. *Esp. Schmett.* iv. pl. 120, f. 1, 2. *Bork. Eur. Schmett.* iv. 137, 55. *Hübn. Samml. Eur. Schmett. Noct.* f. 580, 581; *Larv. Lep.* iv. *Noct.* i. *Bomb.* C, b, f. 2.

Diphtera ludifica, *Treit. Schmett. Eur.* v. 1, 50, 2. *Frey. Neu. Beit. Schmett.* pl. 63. *Dup. Hist. Nat. Lép. Fr.* vi. 190. pl. 85, f. 6. *Boisd. Ind. Méth.* 95, 723. *Guén. Ess.* 236; *Noct.* i. 36, 38. *Steph. Ill. Brit. Ent. Haust.* iii. 46, 1. *Richter, Ent. Zeit. Stett.* iii. 165. *Herr.-Schæff. Eur. Schmett.* ii. 176, 3.

Mœna ludifica, *Hübn. Verz. Schmett.* 203, 2049.

Acronyctia ludifica, *Meig. Syst. Beschr. Eur. Schmett.* iv. 73, 16, pl. 92, f. 1.

e—e. Europe. From M. Becker's collection.

Group 2.

Corpus sat gracile. Proboscis breviuscula. Palpi ascendentes; articulus 3us cylindricus, gracilis, 2i dimidio non brevior. Antennæ graciles. Abdomen alas posticas non superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ.

Pœcilia, p., *Hübn.*

Body rather slender. Proboscis rather short. Palpi ascending; third joint cylindrical, slender, about half the length of the second Antennæ slender. Abdomen extending as far as the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings like those of the first group.

2. Diphtera Orion.

Viridis; thorax nigro bifasciatus; abdomen canum, e maculis nigris trivittatum; alæ anticæ vittis albis, fasciis duabus angulosis liturisque duabus discalibus nigris, guttis submarginalibus albo-nigris; posticæ subcinereæ, margine obscuriore, fasciis duabus late interruptis nigricantibus.

Phalæna-Noctua runica, *Gmel. ed. Syst. Nat.* i. 5, 2560, 1123.

——— ———, *Engr. Pap. d'Eur.* pl. 325. *Schæff. Icon.* pl. 92, f. 3. *Harr. Aur.* pl. 42, f. e; *V. M.* 19.

Noctua Orion, *Sepp, Ins.* iv. pl. 9, f. 1—8. *Esp. Schmett.* iv. pl. 118, f. 4—7. *Bork. Eur. Schmett.* iv. 132, 54.

Noctua aprilina, *Wien Verz.* 70, 6. *Fabr. Mant. Ins.* ii. 172, 247; *Ent. Syst.* iii. 2, 103, 306. *Hübn. Eur. Schmett. Noct.* pl. 5, f. 22; *Larv. Lep.* iv. *Noct.* i. *Bomb.* C, b, f. 1.

Diphtera runica, *Steph. Syst. Cat.* 2, 94, 6, 294.

Diphtera Orion, *Treit. Schmett. Eur.* v. 1, 54, 3. *Steph. Ill. Brit. Ent. Haust.* iii. 46, 2; *Cat. Brit. Lep.* 103, 1. *Dup. Hist. Nat. Lép. Fr.* vi. 203, pl. 85, f, 5. *Boisd. Ind. Méth.* 95, 723. *Guén. Ess.* 236; *Noct.* i. 36, 39. *Curt. Brit. Ent.* ix. pl. 404. *Frey. Neu. Beit.* pl. 63; *Alt. Beit.* pl. 22, 70; *Ent. Zeit. Stett.* ii. 92.

Phalæna-Noctua aprilina, *Donov. Nat. Hist. Brit. Ins.* x. 57, pl. 347, f. 1.

Noctua runica, *Haw. Lep. Brit.* 200.

Pœcilia runica, *Hübn. Verz. Schmett.* 204, 2054.

Acronyctia Orion, *Meig. Handb.* 152, 11, pl. 12, f. 5; *Syst. Besch. Eur. Schmett.* iii. 72, 14, pl. 91, f. 8.

Moma Orion, *Herr.-Schæff. Eur. Schmett.* ii. 176, 2.

a—d. England. From Mr. Stephens' collection.

e—h. England.

i—p. Europe. From M. Becker's collection.

Group 3.

Corpus mediocriter robustum. Proboscis brevis. Palpi breves, non ascendentes; articulus 3us minimus brevissimus. Antennæ *maris* pectinatæ. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ anticæ apice subrotundatæ, margine exteriore sat obliquo.

Panthea, *Hübn. Verz. Schmett.* 203.

Elatina, *Duponch.*

Lælia, p., *Herr.-Schæff. Eur. Schmett.* ii. 137.

Body moderately stout. Proboscis short. Palpi short, not ascending; third joint very short and minute. Antennæ of the male slightly pectinated. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four rather long spurs. Wings rather long, not broad. Fore wings somewhat rounded at the tips, rather oblique along the exterior border; first and second inferior veins contiguous at the base; third joint near the second; fourth remote.

D. cœnobita may perhaps be separated from *Diphtera*, being very different from the first and second groups, which are closely allied to each other.

3. Diphtera cœnobita.

Alba; thorax fascia antica maculis lateralibus vittisque duabus intermediis nigris; abdomen disco nigricante, maculis lateralibus nigris; alæ anticæ fasciis tribus angulosis et ramosis guttisque nigris; posticæ cinerascentes, venis margineque obscurioribus, ciliis albis.

Bombyx cœnobita, *Esp. Schmett.* iii. pl. 37, f. 7; pl. 82, f. 2 *Bork. Eur. Schmett.* iii. 311, 117. *Hübn. Eur. Schmett. Bomb.* pl. 19, f. 72, 73; *Larv.*
Noctua Cœnobita, *Hübn. Eur. Schmett. Noct.* pl. 109, f. 508; *Larv. Lep.* iv. *Noct.* i. *Bomb.* C, a, b, f. a—c; *Lep.* iii. *Bomb.* ii. *Veræ*, C, c, f. 1.
Noctua Panthea, *Fabr. Ent. Syst. Suppl.* 309, 447.
——— ———, *Engr. Pap. d'Eur.* pl. 184.
Diphtera cœnobita, *Treit. Schmett. Eur.* v. 1, 48; *Suppl.* x. 9. *Dup. Hist. Nat. Lép. Fr.* vii. 257, pl. 116, f. 4. *Boisd. Ind. Méth.* 95, 722. *Guén. Noct.* i. 37, 41. *Frey. Neu. Beit. Schmett.* iii. 51, pl. 17; *Ent. Zeit. Stett.* ii. 91.
Acronyctia cœnobita, *Meig. Syst. Besch. Eur. Schmett.* iii. 73, 16, pl. 92, f. 1.
Panthea cœnobita, *Hübn. Verz. Schmett.* 203, 2047.
Elatina cœnobita, *Duponch.*

a—c. Europe. From M. Becker's collection.

North America.

Group 1.

Like the second European group.

4. Diphtera fallax.

Pallide viridis; thorax vittis duabus abbreviatis nigris albo marginatis; abdomen cinereum, maculis dorsalibus trigonis obscurioribus; alæ anticæ fasciis macularibus nigris albo marginatis; posticæ cinereæ, macula discali fasciaque obscurioribus.

Moma fallax, *Herr.-Schæff. Lep. Exot.* f. 211.
Diphtera Orion, *var.* ?

Tennesse.

Group 2.

Proboscis brevis. Palpi brevissimi; articulus 3us minimus. Antennæ graciles, simplices, corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor parvis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore sat obliquo.

Proboscis short. Palpi very short; third joint very small. Antennæ slender, simple, more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout, pilose; hind tibiæ with four short spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, rather oblique along the exterior border.

5. Diphtera jocosa.

Pallide cervina; thorax fasciis albo-nigris; abdomen vitta nigra albido maculata; alæ anticæ fasciis angulatis maculisque nonnullis albo-nigris; posticæ nigricantes, ciliis albidis.

Var. β. Thorax cervino-albidus; alæ anticæ albidæ, punctis fasciisque duabus latis (1a diffusa) nigris.

Diphtera jocosa, *Guén. Noct.* i. 37, 40.

a, b. New York, North America. Presented by E. Doubleday, Esq.

Group ?

6. Diphtera deridens.

Mas. *Cinereo-albida; palpi breves, extus fusci, apice albi; antennæ breves, pectinatæ; thorax cinereo nigroque varius; alæ anticæ flavo tinctæ, lineis flexuosis lunulisque marginalibus nigricantibus, ocelli discalis pupilla fusca; posticæ apud margines albidæ, lunulis nigricantibus.*

Diphtera deridens, *Guén. Noct.* i. 35, 37.

North America.

Mexico.

Group 1.

Corpus robustum. Proboscis brevis. Palpi brevissimi; articulus 3us minimus. Antennæ simplices, sat validæ, corporis dimidio non longiores. Pedes validi; tibiæ posticæ calcaribus parvis. Alæ angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore perobliquo.

Body stout. Proboscis short. Palpi very short; third joint very small. Antennæ simple, rather stout, about half the length of the body. Legs stout; hind tibiæ with four short spurs. Wings narrow. Fore wings straight in front, rounded at the tips, very oblique along the exterior border.

7. Diphtera cavillator.

Alba; thorax nigro maculatus; alæ anticæ lineis transversis obliquis undulosis interruptis duplicatis annulisque duobus connexis discalibus nigris, disco ex parte cinerascente, ciliis nigro guttatis; posticæ nigricantes, ciliis albis linea nigra.

White. Thorax with black spots. Fore wings with black transverse oblique undulating interrupted double lines, and with two connected black discal ringlets; disk partly grayish; fringe with black dots. Hind wings blackish; border white, with a black line. Length of the body 7 lines; of the wings 18 lines.

c. Mexico. Presented by E. Doubleday, Esq.

South America.

Group 1.

Antennæ graciles, corporis dimidio paullo longiores.

Characters of the preceding group. Antennæ slender, rather more than half the length of the body.

8. Diphtera illudens.

Alba; caput, palpi et thorax nigro maculata; alæ anticæ nigro conspersæ et subfasciatæ, litura guttaque discalibus albis.

White. Head, palpi and thorax with black spots. Fore wings with numerous black specks, some of which are confluent, and form

incomplete oblique bands, one of the bands including a white mark and a white dot in the disk. Length of the body 6—8 lines; of the wings 22—24 lines.

a, *b*. Venezuela. From Mr. Dyson's collection.

South America.

Diphtera Encelada.

Fusco-alba; alæ anticæ fuscæ, apud marginem exteriorem albido nigroque variæ, fascia latissima alba-nigro marginata fusco-nigroque maculata; posticæ glaucæ cervino marginatæ, fasciis duabus maculisque marginalibus nigris.

Phalæna Encelada, *Cram. Pap. Exot.* ii. 130, pl. 181, f. F.

Surinam.

Country unknown.

Group 1.

Corpus crassum, aut sat robustum. Proboscis breviuscula. Palpi brevissimi. Antennæ simplices, corporis dimidio non longiores. Abdomen alas posticas non superans. Pedes validi; tibiæ posticæ calcaribus quatuor parvis. Alæ longiusculæ, mediocriter latæ; anticæ apud costam subconvexæ, apice rotundatæ, margine exteriore sat obliquo.

Nearly allied to the *Bombycites*, as are also the two preceding groups. Body thick or rather stout. Proboscis rather short. Palpi extremely short. Antennæ simple, about half the length of the body. Abdomen extending as far as the hind wings. Legs stout; hind tibiæ with four short spurs. Wings moderately broad, rather long. Fore wings slightly convex in front, rounded at the tips, rather oblique along the exterior border.

8. Diphtera sagata.

Alba, crassa; caput subtus et pectus antice nigra; abdomen lateribus ochraceis, fasciis ventreque nigris; alæ anticæ ex parte cervinæ, fasciis angustis obliquis angulosis maculisque marginalibus nigris; posticæ fulvæ, nigro bifasciatæ, apud margines albidæ.

White, thick. Head beneath and fore part of the pectus black. Abdomen with irregular black bands; sides orange-tawny;

under side and tarsi black. Fore wings partly tinged with fawn-colour, which is brightest towards the base, adorned with black slender irregular oblique angular bands, with black costal marks, and with black marginal spots; two little ringlets in the disk. Hind wings tawny, with two black bands, whitish towards the borders. Length of the body 11 lines; of the wings 34 lines.

Pupa clothed with ferruginous hairs.

c. ———?

9. DIPHTERA BIVARIA.

Mas. *Alba, sat robusta; thorax nigro maculatus; alæ anticæ fasciis duabus obliquis abbreviatis cinereis, lineolis plurimis variis, annulis costalibus incompletis annulisque duabus connexis discalibus optime determinatis nigris; posticæ fasciis duabus nigricantibus, disco ex parte cinereo.*

Male. White, rather stout. Thorax with black spots. Fore wings with two gray oblique abbreviated bands, with various short black streaks, with incomplete black costal ringlets, and with two connected very distinct discal ringlets. Hind wings with two blackish bands; the disk partly gray. Length of the body 8 lines; of the wings 26 lines.

In Mr. Saunders' collection.

Note.—Guénée's genus *Prometopus* does not seem to be allied to *Diphtera*, but rather to the second division of *Noctuites*, or, as he remarks, to the *Notodontidæ*.

The genus *Colocasia* which follows *Prometopus* in Guénée's arrangement, is noticed in this Catalogue, 1st Series, p. 787.

The following references are added:—

1. OXICESTA GEOGRAPHICA.

———, *Engr. Pap. d'Eur.* pl. 174, *bis* a—d.

Noctua geographica, *Fabr. Mant. Ins.* ii. 167, 216; *Ent. Syst.* iii. 271. *Bork. Eur. Schmett.* 84.

Phalæna-Noctua geographica, *Gmel. ed. Syst. Nat.* i. 5, 2577, 1179.

Bombyx austera, *Scriba, Beit. Ins.* 176, pl. 7, f. 5; *Esp. Schmett.* pl. 191. *Bork. Eur. Schmett.* 166.

Bombyx sericina, *Hübn. Eur. Schmett. Bomb.* 7, 259. *Beitr.* ii. pl. 4, y.
Gastropacha geographica, *Treit. Schmett. Eur. Bomb.* 47; *Suppl.* x. 198.
Lasiocampa geographica, *Meig. Syst. Beschr. Eur. Schmett.* ii. 708, 18, pl. 80, f. 2.
Clidia geographica, *Boisd. Ind. Méth.* 68, 562. *Dup. Hist. Nat. Lép. Fr.* iii. 184, pl. 84. *Herr.-Schæff. Eur. Schmett.* ii. 177.
Colocasia geographica, *Guén. Ind.* 235; *Noct.* i. 39, 43.

OXICESTA CHAMÆSYCES.

Clidia geographica, *Boisd. Ramb. Grasl. Chen. d'Eur. Boisd. Icon.*
Colocasia Chamæsyces, *Guén. Noct.* i. 40, 44.
Oxicesta geographica, *var.?*

South France.

Genus 3. ACRONYCTA.

Corpus robustum. Proboscis brevis. Palpi pilosi, subascendentes, caput superantes; articulus 3us lanceolatus, 2i dimidio vix brevior. Antennæ simplices, sat graciles. Abdomen alas posticas perpaullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subangulatæ, margine exteriore mediocriter obliquo.

Acronycta, *Ochs. Syst. Gloss.; Treit.; Boisd.; Duponch.; Herr.-Schæff.*
Triæna, Arctomyscis, Hyboma, Jocheæra, Polymixis, p., et Pharetra, *Hübn. Verz. Schmett.* 200—202, 205.
Triæna, Acronycta et Apatela, *Steph. Cat. Brit. Lep.* 104—106.
Acronyctia, p., *Meigen.*

Body stout. Proboscis short. Palpi pilose, slightly ascending, extending some distance beyond the head; third joint lanceolate, nearly half the length of the second. Antennæ simple, rather slender. Abdomen extending very little beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, somewhat angular at the tips, moderately oblique along the exterior border; second inferior vein about four times further from the third than from the first.

Europe.

Group 1.

Alæ anticæ litura ψ signatæ.

Triæna, *Hübn.*
Semaphora, *Guén.* olim.

Fore wings with a mark resembling the letter ψ.

1. Acronycta tridens.

Cana aut cinerea; abdomen albidum; alæ anticæ striga tridentata basali, litura ψ discali lineisque duabus barbatis exterioribus nigris; posticæ cinereo-fuscæ aut albidæ.

——— ———, *Roës, Ins. Bel.* i. pl. 8. *Engr. Pap. d'Eur.* 287, a, e. *Albin, Nat. Hist. Engl. Ins.* pl. 86, f. . *Harr. V. M.* 19.

Phalæna-Noctua tridens, *Gmel. ed. Syst. Nat.* i. 5, 2553, 1130.

Noctua tridens, *Wien. Verz.* 67, 1. *Fabr. Mant. Ins.* ii. 173, 254; *Ent. Syst.* iii. 2, 105, 314. *Haw. Lep. Brit.* 181. *Sepp, Ins.* ii. pl. 22. *Esp. Schmett.* iv. pl. 115, f. 5—8. *Bork. Eur. Schmett.* iv. 244, 107.

Noctua Psi, *Hübn. Eur. Schmett. Noct.* pl. 1, f. 5; *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, b, f. 2, a.

Acronycta tridens, *Treit. Schmett. Eur.* v. 1, 26, 8. *Dup. Hist. Nat. Lép. Fr.* vi. 222, pl. 87, f. 2. *Steph. Ill. Brit. Haust.* iii. 40, 6. *Herr.-Schæff. Eur. Schmett.* ii. 181, 11. *Boisd. Ind. Méth.* 94, 713. *Guén. Noct.* i. 43, 46. *West. & Humph. Brit. Moths*, i. 198, pl. 42, f. 7, 18.

Triæna tridens, *Hübn. Verz. Schmett.* 201, 2031. *Steph. Cat. Brit. Lep.* 104, 2.

Acronyctia tridens, *Meig. Handb.* 149, 5; *Syst. Besch. Eur. Schmett.* iii. 70, 10, pl. 90, f. 10.

Semaphora tridens, *Guén. Ess. Ann. Soc. Ent. Fr.* vi. 235.

a—n. England. From Mr. Stephens' collection.
o—t. England.
v—x. Europe. From M. Becker's collection.

2. Acronycta Psi.

Cana aut cinerea; abdomen albidum; alæ anticæ striga tridentat basali, litura ⊥ discali lineisque duabus barbatis exterioribu nigris; posticæ cinereo-fuscæ aut albidæ.

——— ———, *Göed. Ins.* i. pl. 22. *List. Göed.* f. 92. *Ray, In* 350. *Réaum. Ins.* i. pl. 42, f. 5, 6. *Merian, Ins. Eur.* iii. p 42. *Frisch, Ins.* ii. pl. 2. *Ammir. Ins.* pl. 13. *Roës. In Bel.* i. pl. 7. *Geoff. Ins. Par.* 155. *Wilk.* 28, pl. 60. *Engr Pap. d'Eur.* 286, *a*—c. *Albin, Nat. Hist. Engl. Ins.* pl. 8(*Harr. A.* pl. 15; *V. M.* 19.

Phalæna-Noctua Psi, *Linn. Syst. Nat.* i. 2, 846, 135; *Faun. Suec* 1181. *Gmel. ed. Syst. Nat.* i. 5, 2559, 135. *Berk. Syn.* 141. *Donov. Nat. Hist. Brit. Ins.* iv. pl. 133. *Stew. El.* i 187. *Turt. Syst. Nat.* iii. 330.

Noctua Psi, *Wien. Verz.* 67, 2. *Fabr. Sp. Ins.* ii. 235, 129 *Mant. Ins.* ii. 174, 255; *Ent. Syst.* iii. 2, 105, 315. *Esp Schmett.* iv. pl. 115, f. 1, 2. *Bork. Eur. Schmett.* iv. 238, 106 *Haw. Lep. Brit.* 181. *Frey. Neu. Beit. Schmett.* i. pl. 58.

Acronycta Psi, *Treit. Schmett. Eur.* v. 1, 30, 9. *Dup. Hist. Nat Lép. Fr.* vi. 218, pl. 83, f. 1. *Steph. Ill. Brit. Ent. Haust.* iii 39, 5. *Guén. Noct.* i. 43, 47. *Boisd. Ind. Méth.* 94, 714 *Herr.-Schæff. Eur. Schmett.* ii. 181, 12. *Westw. & Humph Brit. Moths*, i. 198, pl. 41, f. 5; pl. 42, f. 116.

Triæna Psi, *Hübn. Verz. Schmett.* 200, 2029. *Steph. Cat. Brit Lep.* 104, 1.

Acronyctia Psi, *Meig. Handb.* 149, 4; *Syst. Besch. Eur. Schmett* iii. 69, 9, pl. 90, f. 9.

Semaphora Psi, *Guén. Ess.* 235.

Noctua tridens, *Sepp, Ins.* iv. pl. 4. *Hübn. Eur. Schmett. Noc* pl. 1, f. 4; *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, b, f. b, c.

Var. Acronycta Cuspis, *Steph. Ill. Brit. Ent. Haust.* iii. 40, 7.

a. England. Presented by H. Doubleday, Esq.
b—t. England. From Mr. Stephens' collection.
v—z. England.
aa—ee. Europe. From M. Becker's collection.
ff, gg. France.
hh. ———? From Mr. Milne's collection.
ii—pp. New York. Presented by E. Doubleday, Esq.

The American *A. Psi* has a slight testaceous tinge on the fo wings; the markings also are somewhat different from those of t European *A. Psi*, and it may be a distinct species.

3. Acronycta Cuspis.

Cana; abdomen cinereo-albidum; alæ anticæ maculis costalibus, striga tridentata basali, litura ψ incompleta discali, fascia tenui exteriore lineaque una barbata postica nigris; posticæ cinereo-fuscescentes.

——— ———, *Engr. Pap. d'Eur.* 287, d.

Noctua Psi, *Hübn. Samml. Eur. Schmett.* 504. *Frey. Neu. Beit. Schmett.* i. pl. 57.

Acronycta Cuspis, *Treit. Schmett. Eur.* i. 32; *Suppl.* 4. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 150, pl. 15. *Boisd. Icon.* pl. 71; *Ind. Méth.* 94, 715. *Guen. Noct.* i. 43, 48. *Herr.-Schæff. Eur. Schmett.* ii. 181, 13.

Semaphora Cuspis, *Guén. Ess.* 235.

Triæna Cuspis, *Hübn. Verz. Schmett.* 200, 2030.

a—c. Europe. From M. Becker's collection.

d, e. ———?

Group 2.

Color albus; alæ anticæ punctis liturisque costalibus et discalibus guttisque marginalibus nigris.

Apatela, *Steph.*

Colour white. Fore wings with black costal and discal points and marks, and with black marginal dots.

4. Acronycta leporina.

Alba; alæ anticæ guttis costalibus et marginalibus lineolisque nonnullis discalibus plus minusve angulatis nigris.

——— ———, *Deg. Ins.* i. 210; ii. 411, pl. 12. *Engr. Pap. d'Eur.* 296, a—d.

Phalæna-Noctua leporina, *Linn. Syst. Nat.* i. 2, 109. *Faun. Suec.* 1176. *Donov. Nat. Hist. Brit. Ins.* pl. 327.

Noctua leporina, *Wien. Verz.* 67, 8. *Esp. Schmett.* iv. pl. 91, f. 1—5. *Bork. Eur. Schmett.* iii. 303, 103. *Hübn. Samml. Eur. Schmett. Noct.* pl. 3, f. 15. *Haw. Lep. Brit.* 182, 52.

Acronycta leporina, *Treit. Schmett. Eur.* v. 1, 51. *Dup. Hist. Nat. Lép. Fr.* vi. 3, 225, pl. 87, f. 3. *Boisd. Ind. Méth.* 94, 707. *Guén. Noct.* i. 46, 56. *Herr.-Schæff. Eur. Schmett.* ii. 180, 10.

Apatela leporina, *Steph. Ill. Brit. Haust.* iii. 35, 1; *Cat. Brit. Lep.* 106, 2. *Westw. & H. Brit. Moths*, i. 193, pl. 41, f. 1; pl. 42, f. 13.

Acronicta leporina, *Hübn. Verz. Schmett.* 201, 2035.

Bombyx leporina, *Fabr. Sp. Ins.* ii. 191, 94; *Mant. Ins.* ii. 124, 33; *Ent. Syst.* iii. 1, 453, 144. *Fuessl. Ent. Mag.* ii. pl. 1, f. 1. *Turt. Syst. Nat.* iii. 215.

Phalæna-Bombyx leporina, *Gmel. ed. Syst. Nat.* i. 5, 2437, 109.

Noctua Bradyporina, *Hübn. Eur. Schmett. Noct.* pl. 124, f. 570, 571.

Acronyctia leporina, *Meig. Handb.* 148, 1, pl. 12, f. 3; *Syst. Besch. Eur. Schmett.* iii. 65, 1, pl. 90, f. 8.

Var. Acronycta bradyporina, *Treit. Schmett. Eur.* v. 1, 92.

Apatela bradyporina, *Steph. Ill. Brit. Ent. Haust.* iii. 36, 2, pl. 26, f. 3. *Westw. & H. Brit. Moths*, i. 193, pl. 41, f. 4; pl. 42, f. 12.

Noctua leporina, var. *Sepp. Ins.* i. pl. 23. *Hübn. Eur. Schmett. Noct.* pl. 4, f. 16; pl. 124, f. 570, 571. *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, d, f. 1.

——— ———, *Engr. Pap. d'Eur.* pl. 296, f. c.

Acronicta bradyporina, *Hübn. Verz. Schmett.* 201, 2036.

Var. *Abdomen fasciis roseis; alæ anticæ basi roseæ.*

——— ———, *Engr. Pap. d'Eur.* pl. 297, f. a, b.

a—l. England. From Mr. Stephens' collection.
m—q. England.
r—t. Europe. From M. Becker's collection.
v. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

Group 3.

Color cinereus. Abdomen pallidum. Alæ anticæ nigro conspersæ, lineis transversis undulatis annuloque discali nigris ornatæ; posticæ albæ.

Arctomyscis, p., *Hübn.*

Colour cinereous. Abdomen paler. Fore wings sprinkled with black, adorned with black transverse undulating lines, and with a black discal ringlet. Hind wings white.

5. Acronycta Aceris.

Cinerea; abdomen canescens maculis dorsalibus obscurioribus; alæ anticæ atomis, lineis tribus transversis duplicatis angulosis annuloque discali nigris; posticæ albæ, strigis marginalibus fuscescentibus.

——— ———, *Albin, Nat. Hist. Eugl. Ins.* pl. 83. *Réaum. Ins.* i. pl. 34, f. 11. *Frisch. Ins.* i. pl. 5. *Wilk.* 32, pl. 67. *Engr. Pap. d'Eur.* 295, a—f. *Harr. V. M.* 47.

Phalæna-Noctua Aceris, *Linn. Syst. Nat.* i. 2, 846, 137; *Faun. Suec.* 1179. *Scop. Ent. Carn*, 524. *Gmel. ed. Syst. Nat.* i. 5, 2560, 137. *Berk. Syn.* i. 141. *Donov. Nat. Hist. Engl. Ins.* x. 15, pl. 330. *Stew. El. Nat. Hist.* ii. 188. *Turt. Syst. Nat.* iii. 331.

Noctua Aceris, *Wien. Verz.* 67, 7. *Fabr. Mant. Ins.* ii. 174, 259. *Ent. Syst.* iii. 2, 107, 322. *Esp. Schmett.* iv. pl. 117. (Rumicis erratim); pl. 114, f. 4—7. *Bork. Eur. Schmett.* iv. 202, 102. *Sepp. Ins.* iii. pl. 16. *Hübn. Samml. Eur. Schmett. Noct.* pl. 3, f. 13, 14. *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, c, d, f. 2. *Haw. Lep. Brit.* 176.

Acronycta Aceris, *Treit. Schmett. Eur.* v. 1, 11, 3. *Dup. Hist. Nat. Lép. Fr.* vi. 253, pl. 88, f. 5. *Guén. Ess.* 235: *Noct.* i. 48, 58. *Boisd. Ind. Méth.* 94, 708. *Herr.-Schæff. Eur. Schmett.* ii. 184, 22.

Arctomyscis Aceris, *Hübn. Verz. Schmett.* 202, 2041.

Apatela Aceris, *Steph. Ill. Brit. Ent. Haust.* iii. 36, 3; *Cat. Brit. Lep.* 106, 1. *Westw. & H. Brit. Moths*, i. 194, pl. 41, f. 5, 6; pl. 42, f. 17.

Acronyctia Aceris, *Meig. Handb.* 151, 10; *Syst. Besch. Eur. Schmett.* iii. 65, 2, pl. 91, f. 2.

Var. *Alæ anticæ obscuriores, plus flavescentes, lineis maculisque magis determinatis.*

Noctua candelisequa, *Esp. Schmett.* iv. pl. 191, f. 1.
Acronycta paradoxa, *Boisd. Ind. Méth. ed.* i. 60.

e—i. England. From Mr. Stephens' collections.
j—p. England.
q—s. Europe. From M. Becker's collection.
t, v. France.

Group 4.

Arctomyscis, p., *Hübn.*

Much like the third group as regards the disposition of the colours.

6. Acronycta megacephala.

Subrufescente-cinerea; abdomen canescens; alæ anticæ atomis lineis tribus transversis (duabus duplicatis unaque exterior simplici) angulosis annuloque discali nigris; posticæ albæ strigis marginalibus fuscescentibus.

———, *Deg. Ins.* ii. 413, pl. 7, f. 9. *Engr. Pap. d'Eur* 294, a—d. *Harr. V. M.* 47.

Noctua megacephala, *Wien. Verz.* 67, 5. *Fabr. Mant. Ins.* ii 175, 261; *Ent. Syst.* iii. 2, 108, 325. *Esp. Schmett.* iv. pl. 65, f. 1. *Bork. Eur. Schmett.* iv. 222, 102. *Sepp. Ins.* iii. pl. 9. *Hübn. Samml. Eur. Schmett. Noct.* pl. 2, f. 10; pl. 3, f. 11. *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, c, f. 2. *Haw. Lep. Brit.* 177.

Acronycta megacephala, *Treit. Schmett.* v. 1, 13, 4. *Dup. Hist. Nat. Lép. Fr.* vi. 3, 244, pl. 88, f. 6. *Steph. Ill. Brit. Haust.* iii. 37, 1. *Cat. Brit. Lep.* 106, 9. *Boisd. Ind. Méth.* 94, 709. *Westw. & H. Brit. Moths*, i. 195, pl. 41, f. 1, 2; pl. 42, f. 16. *Herr.-Schæff. Eur. Schmett.* ii. 184, 23. *Guén. Noct.* i. 49, 62.

Phalæna-Noctua megalocephala, *Gmel. ed. Syst. Nat.* i. 5, 2560, 1122.

Noctua macrocephala, *Villars, Ent.* ii. 175.

Arctomyscis megacephala, *Hübn. Verz. Schmett.* 202, 2046.

Acronyctia megaphala, *Meig. Handb.* 151, 9; *Syst. Besch. Eur. Schmett.* iii. 66, 3, pl. 90, f. 1.

a—c. England. Presented by H. Doubleday, Esq.
d—p. England. From Mr. Stephens' collection.
q—t. England.
v—x. Europe. From M. Becker's collection.

Group 5.

Alæ anticæ albo nigroque marmoratæ.

Hyboma et Jocheæra, *Hübn.*

Fore wings marbled with black and white.

7. Acronycta strigosa.

Cinerascens; alæ anticæ fusco nebulosæ, vitta interrupta posteriore annulo discali guttisque marginalibus nigris, fasciis angulosis albis nigro marginatis, macula discali testacea ex parte nigro marginata, posticæ albidæ, linea margineque subfuscescentibus.

——— ———, *Engr. Pap. d'Eur.* 285, a, b.

Noctua strigosa, *Fabr. Mant. Ins.* ii. 142, 61; *Ent. Syst.* iii. 1, 32, 79. *Wien. Verz.* 88, 15? *Bork. Eur. Schmett.* iv. 652, 277.

Phalæna-Noctua strigosa, *Gmel. ed. Syst. Nat.* i. 5, 2546, 1053.

Noctua favillacea, *Naturf.* 1787, pl. 3, f. 5—8. *Bork. Eur. Schmett.* iv. 217, 100. *Esp. Schmett.* iv. pl. 127, f. 4. *Hübn. Samml. Eur. Schmett. Noct.* pl. 1, f. 2; *Larv. Lep.* iv. *Noct.* iv. *Bomb.* A, B, f. 22.

Acronycta favillacea, *Dup. Hist. Nat. Lép. Fr.* vi. 3, 230, pl. 87, f. 4.

Acronycta strigosa, *Steph. Ill. Brit. Haust.* iii. 39, 4; *Cat. Brit. Lep.* 105, 3. *Treit. Schmett. Eur.* v. 1, 23, 7. *Boisd. Ind. Méth.* 94, 712. *Guén. Ess.* 235; *Noct.* i. 51, 65. *Freyer, Neu. Beit. Schmett.* pl. 22. *Wood, Ind. Ent.* pl. 52, f. 1667. *Herr.-Schæff. Eur. Schmett.* ii. 181, 14.

Hyboma strigosa, *Hübn. Verz. Schmett.* 200, 2027.

Acronycta strigosa, *Meig. Handb.* 148, 3; *Syst. Besch. Eur. Schmett.* iii. 71, 12; pl. 90, f. 13.

a. England. From Mr. Stephens' collection.
b, c. Europe. From M. Becker's collection.
d. France.

8. Acronycta Alni.

Cana; thorax lineis lateralibus nigris; abdomen album; alæ anticæ cinereo subnebulosæ, vitta interrupta lituris costalibus guttisque marginalibus nigris; posticæ albæ, cinereo marginatæ.

——— ———, *Deg. Ins.* i. 280, pl. 11, f. 25—28; ii. 412. *Engr. Pap. d'Eur.* 386, a—e.

Phalæna-Noctua Alni? *Linn. Syst. Nat.* i. 2, 845. *Gmel. ed. Syst. Nat.* i. 5, 2559, 134. *Turt. Syst. Nat.* iii. 322. *Donov. Nat. Hist. Brit. Ins.* x. 8, pl. 327, f. 2.

Noctua Alni, *Capieuz, Naturf*, xii. 58, pl. 1, f. 4; xiv. 91, pl. 4 f. 11. *Fuessl. Ent. Mag.* ii. pl. 1, f. 5—8. *Fabr. Sp Ins.* ii. 231, 110; *Mant. Ins.* ii. 166, 213; *Ent. Syst.* iii. 2 89, 266. *Esp. Schmett.* iv. pl. 116, f. 4—6. *Bork. Eur Schmett.* iv. 250, 109. *Hübn. Samml. Eur. Schmett. Noct.* pl 1, f. 3; *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, b, f. a—d.

Acronycta Alni, *Treit. Schmett. Eur.* v. 1, 16, 5. *Dup. Hist. Nat Lép. Fr.* vi. 3, 233, pl. 87, f. 5. *Steph. Ill. Brit. Haust.* iii. 38 3; *Cat. Brit. Lep.* 105, 2. *Boisd. Ind. Méth.* 94, 710. *Guén. Ann. Soc. Ent. Fr.* vi. 235; *Noct.* i. 51, 66. *Freyer, Beitr.* pl 16. *Westw. & H. Brit. Moths*, i. 195, pl. 41, f. 14; pl. 42, f. 3. *Herr.-Schæff. Eur. Schmett.* ii. 182, 15.

Noctua degener, *Wien. Verz.* 70, 4.

Jocheæra Alni, *Hübn. Verz. Schmett.* 201, 2034.

Acronyctia Alni, *Meig. Syst. Besch. Eur. Schmett.* iii. 70, 11, pl. 90, f. 12.

a, *b*. England. From Mr. Stephens' collection.
c. England. From Mr. Haworth's collection.
d. England.

9. Acronycta Ligustri.

Thorax albus, atomis fasciisque duabus nigris; abdomen cinereum; alæ anticæ nigro-cinereæ, lineis transversis undulatis nigris, plaga, strigis annuloque discali albis; posticæ fuscescentes.

——— ———, *Deg. Ins.* i. 113, pl. 5; ii. 434. *Engr. Pap. d'Eur.* 320, a—d. *Harr. V. M.* 19?

Noctua Ligustri, *Wien. Verz.* 70, 1. *Fabr. Mant. Ins.* ii. 172, 244. *Ent. Syst.* iii. 2, 102, 303. *Kléem. Ins. Gesch.* i. pl. 22, f. 1—6. *Esp. Schmett.* iv. pl. 119, f. 1—4. *Bork. Eur. Schmett.* iv. 125, 51. *Hübn. Samml. Eur. Schmett. Noct.* pl. 5, f. 21; *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, b, f. 2 a. *Haw. Lep. Brit.* 52, 178.

Noctua litterata, *Panz. Nomencl. Schæff. Icon.* ii. 105, f. 3, 4.

Phalæna-Noctua Ligustri, *Gmel. ed. Syst. Nat.* i. 5, 2569, 1151.

Polymixis Ligustri, *Hübn. Verz. Schmett.* 205, 2060.

Acronycta Ligustri, *Treit. Schmett. Eur.* v. 1, 20. *Dup. Hist. Nat. Lép. Fr.* vi. 256, pl. 89, f. 1. *Steph. Ill. Brit. Ent. Haust.* iii. 38, 2; *Cat. Brit. Lep.* 104, 1. *Guén. Ess.* 235; *Noct.* i. 51, 67. *Boisd. Ind. Méth.* 94, 711. *Frey. Beitr.* pl. 142. *Westw. & H. Brit. Moths*, i. 194, pl. 41, f. 12; pl. 42, f. 1. *Herr.-Schæff. Eur. Schmett.* ii. 184.

Var. Noctua coronula, *Haw. Lep. Brit.* 179.

Acronyctia Ligustri, *Meig. Handb.* 148, 2; *Syst. Besch. Eur. Schmett.* iii. 72, 13, pl. 91, f. 7.

e—g. England. From Mr. Stephens' collection.
h—m. England.
n—p. Europe. From M. Becker's collection.
r. ———?

Group 6.

Artomyscis et Pharetra, *Hübn.*

Between the fourth group and the fifth, as regards the tracings on the fore wings.

10. Acronycta Rumicis.

Cinerea; abdomen sordide albidum; alæ anticæ nebulis obscurioribus, lineis angulosis transversis, guttis marginalibus annulisque duobus discalibus nigris; posticæ sordide albidæ, cinereo marginatæ.

———, *Albin, Nat. Hist. Engl. Ins.* pl. 22. *Merian, Ins. Eur.* pl. 82. *Deg. Ins.* i. 185, pl. 9; ii. 411. *Roës. Ins. Belg.* i. pl. 27. *Wilk.* 26, pl. 56. *Engr. Pap. d'Eur.* 288, a—f. *Harr. V. M.* 29.

Phalæna-Noctua Rumicis, *Linn. Syst. Nat.* i. 2, 516; *Faun. Suec.* 1200. *Gmel. ed. Syst. Nat.* i. 5, 2569, 164. *Berk. Syn.* i. 142. *Donov. Hist. Nat. Brit. Ins.* iv. pl. 126. *Stew. El.* ii. 190. *Turt. Syst. Nat.* iii. 335.

Noctua Rumicis, *Wien. Verz.* 67, 3. *Fabr. Sp. Ins.* ii. 238, 143; *Mant. Ins.* ii. 180, 288; *Ent. Syst.* iii. 1, 118, 358. *Esp. Schmett.* iv. pl. 117, f. 8, 9; pl. 117, a, f. 3, 4. (Aceris erratim). *Bork. Eur. Schmett.* iv. 247, 108. *Hübn. Samml. Eur. Schmett. Noct.* pl. 2, f. 93; *Larv. Lep.* iv. *Noct.* i. *Bomb.* b, c, f. 1. *Haw. Lep. Brit.* 50, 178.

Acronycta Rumicis, *Treit. Schmett. Eur.* i. 38. *Steph. Ill. Brit. Ent. Haust.* iii. 42, 11; *Cat. Brit. Lep.* 105, 6. *Dup. Hist. Lép. Fr.* vi. 241, pl. 88, f. 2. *Boisd. Ind. Méth.* 95, 718. *Guén. Ess.* 235; *Noct.* i. 53, 70. *Westw. & Humph. Brit. Moths*, i. 197, pl. 41, f. 12; pl. 42, f. 15. *Herr.-Schæff. Eur. Schmett.* ii. 182, 18.

Var. Noctua Euphorbiæ, *Haw. Lep. Brit.* 178.

Acronyctia Rumicis, *Meig. Handb.* 150, 8; *Syst. Besch. Eur. Schmett.* iii. 69, 8, pl. 91, f. 6.

Var. Acronycta Euphorbiæ, *Steph. Ill. Brit. Ent. Haust.* iii. 4
12.
Var. Acronycta Euphrasiæ, *Steph. Ill. Brit. Ent. Haust.* iii. 4
13.
Var. Acronycta Salicis, *Curt. Brit. Ent.* iii. pl. 136. *Steph. Ca*
Brit. Lep. 106, 7.
Acronycta Euphorbiæ, *Wood, Ind. Ent.* pl. 14, f. 320.

a. England. Presented by S. Stevens, Esq.
b—w. England. From Mr. Stephens' collection.
x—bb. England.
cc. Scotland. From Mr. Weaver's collection.
dd—ee. Europe. From M. Becker's collection.
ff—ii. France.

11. ACRONYCTA AURICOMA.

Cinerea; abdomen canescens; alæ anticæ atomis, lineis duabus transversis duplicatis (interiore undulata exteriore denticulata) ocelloque discali nigris; posticæ fusco-subcinereæ.

———, *Roës. Ins. Bel.* i. pl. 44, f. 1, 6. *Engr. Pap. d'Eur.* 289, a—c.
Noctua auricoma, *Wien. Verz.* 67, 6. *Fabr. Mant. Ins.* ii. 174, 256; *Ent. Syst.* iii. 2, 105, 216. *Esp. Schmett.* iv. pl. 117, f. 4—6; pl. 117, A, f. 1, 2. *Bork. Eur. Schmett.* iv. 234, 105, *Hübn. Samml. Eur. Schmett. Noct.* pl. 2, f. 8; *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, b, c, f. 2. *Haw. Lep. Brit.* 58.
Noctua Lapathi, *Schr. Faun. Boic.* 1499.
Noctua similis, *Haw. Lep. Brit.* 57, 180.
Phalæna-Noctua auricoma, *Gmel. ed. Syst. Nat.* i. 5, 2559, 1119.
Noctua Pepli, *Hübn. Samml. Eur. Schmett. Noct.* pl. 134, f. 614.
Acronycta auricoma, *Treit. Schmett. Eur.* v. 1, 35, 12. *Dup. Hist. Nat. Lép. Fr.* vi. 3, 326, pl. 87, 6. *Steph. Ill. Brit. Ent. Haust.* iii. 41, 8; *Cat. Brit. Lep.* 105, 4. *Guén. Noct.* i. 55, 75. *Boisd. Ind. Méth.* 95, 717. *Westw. & Humph. Brit. Moths*, i. 196, pl. 41, f. 101; pl. 42, f. 9. *Herr.-Schæff. Eur. Schmett.* ii. 182, 17.
Acronycta similis, *Steph. Ill. Brit. Ent. Haust.* ii. 41, 9.
Pharetra auricoma, *Hübn. Eur. Schmett.* 202, 2039.
Acronyctia auricoma, *Meig. Handb.* 150, 7; *Syst. Besch. Eur. Schmett.* iii. 67, 4, pl. 91, f. 3.

a—j. England. From Mr. Stephens' collection.
k—o. England.
p. Europe. From M. Becker's collection.
q. France. From Mr. Milne's collection.
r, s. France.

12. Acronycta Menyanthidis.

Cana; abdomen albidum; alæ anticæ annulis duobus discalibus, fasciaque tenui interiore undulata subduplicata nigris, fascia exteriore denticulata albo-nigra, guttis marginalibus nigris; posticæ albidæ.

Noctua Menyanthidis, *Esp. Schmett.* iv. 461, pl. 144, f. 5. *View. Schmett.* 56, pl. 2, f. 1, 2. *Sepp. Ins.* iv. pl. 49. *Hübn. Samml. Eur. Schmett. Noct.* pl. 2, f. 6, 7.

Acronycta Menyanthidis, *Treit. Schmett. Eur.* v. 1, 34, 11. *Dup. Hist. Nat. Lép. Fr.* vi. 3, 289, pl. 88, f. 1. *Steph. Ill. Brit. Haust.* iii. 42, 10, pl. 27, f. 1; *Cat. Brit. Lep.* 105, 5. *Boisd. Ind. Méth.* 95, 716. *Guén. Noct.* i. 55, 76. *Herr-Schæff. Eur. Schmett.* ii. 182, 16.

Pharetra Menyanthidis, *Hübn. Verz. Schmett.* 202, 2040.

Acronyctia Menyanthidis, *Meig. Handb.* 150, 6, pl. 12, f. 4.

Acronycta Menyanthidis, *Westw. & Humph. Brit. Moths*, i. 196, pl. 42, f. 11.

e—e. England. From Mr. Carter's collection.
f—a. England. From Mr. Stephens' collection.
p. England.
r—a. Europe. From M. Becker's collection.

Group 7.

Arctomyscis, p., *Hübn.*

Marbled marks on the fore wings more obscure, minute and blended than in the sixth group.

13. Acronycta Euphorbiæ.

Cineres; alæ anticæ lineis duabus transversis (exteriore flexa) undulatis annulisque duobus discalibus nigricantibus; posticæ albidæ.

——— ———, *Engr. Pap. d'Eur.* 293, a, b.

Phalæna-Noctua Euphorbiæ, *Gmel. ed. Syst. Nat.* i. 5, 2560, 1121.

Noctua Euphorbiæ, *Wien. Verz.* 67, 4. *Fabr. Mant. Ins.* ii. 174, 260; *Ent. Syst.* iii. 2, 108, 324. *Esp. Schmett.* 117, f. 1, 2. *Schr. Faun. Boic.* 1500.

Acronycta Euphorbiæ, *Treit. Schmett.* v. 1, 40, 147. *Herr.-Schæff. Schmett. Eur.* ii. pl. 73, f. 375, 376 (377 ?). *Guén. Noct.* i. 56, 78. *Boisd. Ind. Méth.* 95, 719. *Herr.-Schæff. Eur. Schmett.* ii. 184, 19.

Arctomyscis Euphorbiæ, *Hübn. Verz. Schmett.* 202, 2042.

Arctomyscis Cyparissiæ, *Hübn. Verz. Schmett.* 202, 2045.

Acronycta Euphorbiæ, *var.* A. Montivaga, *Guén. Noct.* i. 57.

Noctua Euphorbiæ? *Hübn. Eur Schmett. Noct.* pl. 3, f. 12.

Noctua Euphrasiæ? *Bork. Eur. Schmett.* iv. 227, 232, 104.

Acronyctia Euphorbiæ, *Meig. Syst. Besch. Eur. Schmett.* iii. 68, 6, pl. 91, f. 4.

a—c. Europe. From M. Becker's collection.

14. Acronycta Euphrasiæ.

Cinerea; abdomen sordide albidum; alæ anticæ annulo discali, lineis transversis duplicatis (duabus exterioribus denticulatis una interiore undulosa) punctisque marginalibus nigris; posticæ sordide albidæ.

——— ———, *Albin, Nat. Hist. Engl. Ins.* pl. 88, f. F (larva).

Noctua Euphorbiæ, *Scriba, Beit. Ins. Gesch.* ii. 109, pl. 9. *Bork. Eur. Schmett.* iv. 227, 103. *Haw. Lep. Brit.* 51? *Hübn. Samml. Eur. Schmett. Noct.* pl. 134, f. 613. *Dup. Hist. Nat. Lep. Fr.* iii. 250, pl. 88, f. 3.

Noctua Euphrasiæ, *Esp. Schmett.* iv. pl. 117, f. 1—3. *Herr.-Schæff. Schmett. Eur.* ii. pl. 73, f. 373, 374.

Noctua Cyparissæ, *Hübn. Samml. Eur. Schmett. Noct.* pl. 134, f. 615.

Noctua abscondita, *Herr.-Schæff. Schmett. Eur.* ii. pl. 18, f. 87—89.

Noctua Esulæ, *Hübn. Eur. Schmett. Noct.* pl. 134, f. 613.

Acronycta Euphrasiæ, *Treit. Schmtt. Eur.* v. 1, 43, 15. *Dup. Hist. Nat. Lép. Fr.* vi. 3, pl. 88, f. 4. *Boisd. Ind. Méth.* 95, 720. *Noct.* i. 43, 13. *Herr.-Schæff. Eur. Schmett.* ii. 184, 20.

Acronyctia Euphorbiæ, *Dup. Hist. Nat. Lép. Fr.* vi. 3, pl. 88, f. 3.

Acronyctia Euphrasiæ, *Meig. Syst. Besch. Eur. Schmett.* iii. 68, 7, 7, pl. 91, f. 5.

Arctomyscis Euphrasiæ, *Hübn. Verz. Schmett.* 202, 2044.

a, b. Europe. From M. Becker's collection.

15. Acronycta abscondita.

Cinerea; alæ anticæ macula annuloque discali maculisque costalibus pallidioribus, necnon fasciis duabus pallidioribus nigricante marginatis, ciliis nigricante guttatis.

Acronycta abscondita *Treit. Schmett. Eur. Suppl.* x. 5. *Frey. Neu. Beit. Schmett.* ii. 132, pl. 178? *Herr.-Schæff. Schmett. Eur.* ii. pl. 73, f. 378. *Boisd. Ind. Méth.* 95, 721. *Guén. Noct.* i. 59, 80. *Herr.-Schæff. Eur. Schmett.* ii. 184, 21.

Europe.

16. Acronycta Myricæ.

Obscure cinerea; alæ anticæ annulis duobus lineisque transversis angulosis nigricantibus lineolisque exterioribus albidis; posticæ maris albidæ, fœm. fuscescentes.

Acronycta Myricæ, *Guén. Noct.* i. 59, 81.
Acronycta Euphorbiæ, *Steph. Cat. Brit. Lep.* 117, 8.

a. Scotland. Presented by S. Stevens, Esq.
b—e. Scotland. From Mr. Stephens' collection.
f, g. Scotland. From Mr. Foxcroft's collection.
h. Scotland. From Mr. Stevens' collection.

North America.

Group 1.

Like the first European group.

17. Acronycta tritona.

Cinerea; alæ anticæ strigis duabus furcatis (una basali, altera apud angulum interiorem), annulo discali fasciis duabus subobsoletis unaque exteriore angulata nigris; posticæ fuscescentes.

Triæna tritona (Noctua bombycoides, Apatele conformis), *Hübn. Samml. Exot. Schmett.* i. 21, 54, f. 107, 108; *Verz. Schmett.* 201, 2032.
Acronycta tritona, *Guén. Noct.* i. 42, 45.

a. Florida. Presented by E. Doubleday, Esq.
b. ——?

18. Acronycta Lobeliæ.

Pallide cinerea; abdomen canum; alæ anticæ lineis transversis angulosis, lineola trifurcata discali, lineola submarginali vittaque posteriore ramosa late interrupta nigris; posticæ albæ.

Acronycta Lobeliæ, *Guén. Noct.* i. 44, 47.

a. New York. Presented by E. Doubleday, Esq.

19. Acronycta furcifera.

Var.? *Cinerea; abdomen albidum; alæ anticæ vitta late interrupta, lituris nonnullis discalibus strigisque exterioribus cuneatis nigris, litura ψ non bene determinata; posticæ pallidissime fuscæ, basi albidæ.*

Acronycta furcifera, *Guén. Noct.* i. 44, 50.

Var.? Cinereous. Abdomen whitish. Fore wings with a black widely interrupted stripe, with a few black discal marks, and with exterior cuneiform black streaks; one of the latter, traversing the stripe, forms an imperfect ψ. Hind wings very pale brown, whitish towards the base. Length of the body 7 lines; of the wings 18 lines.

a. Florida. Presented by E. Doubleday, Esq.

20. Acronycta hasta.

A. furciferæ *simillima, obscurior; alæ anticæ violaceo-cinereæ; posticæ sordide cinerascentes, subiridescentes, subtus albidæ fascia media maculaque discali obscuris.*

Acronycta hasta, *Guén. Noct.* i. 45, 51.

United States.

21. Acronycta telum.

A. furciferæ *affinis; alæ anticæ cinereæ, conspersæ, angustæ, oblongæ, apice productæ; posticæ sordide albidæ, subiridescentes, margine venisque nigricantibus, subtus albæ striga basali macula discali, linea interrupta punctisque marginalibus nigris.*

Acronycta telum, *Guén. Noct.* i. 45, 52.

United States.

22. Acronycta spinigera.

Cana; alæ anticæ fusco conspersæ, vitta latissime interrupta, annulis duobus disculibus subobsoletis, linea exteriore angulosa transversa lineolaque submarginali nigricantibus; posticæ pallidissime fuscescentes.

Acronycta spinigera, *Guén Noct.* i. 45, 53.

a—c. New York, United States. Presented by E. Doubleday, Esq.

23. Acronycta interrupta.

Alba, A. Psi *minor; alæ anticæ lineis maculisque solitis strigisque costalibus pallide nigricantibus, linea basali nigra apud medium angulata, apice bifurcata, striga apud marginem internum, striga altera parallela, linea maculam reniformem transeunte punctisque marginalibus nigris; posticæ flavescente-cinereis.*

Acronycta interrupta, *Guén. Noct.* i. 46, 54.

Georgia.

24. Acronycta lepusculina.

A. interruptæ *et* A. leporinæ *affinis*, A. leporina *paullo major.*

Var.? *Cana; alæ punctis marginalibus nigris; alæ anticæ fasciis duabus incompletis nigricantibus fasciaque exteriore obliqua guttulari nigra; posticæ albidæ.*

Acronycta lepusculina, *Guén. Noct.* i. 46, 55.

North America?

Var.? Hoary. Wings with black dots along the exterior border. Fore wings with two incomplete nearly upright blackish bands, and with an exterior oblique dotted black band. Hind wings whitish. Length of the body 8 lines; of the wings 18 lines.

Var. β. First band almost obsolete; second and third very incomplete.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

b. United States. Presented by E. Doubleday, Esq.

25. Acronycta modica.

Albida; alæ anticæ lineis nonnullis undulatis transversis interruptis nigricantibus, striga basali bene determinata annulisque duobus incompletis nigris, litura ψ non bene determinata; posticæ cinereæ, fasciis duabus margineque obscurioribus.

Whitish. Fore wings with several undulating transverse interrupted blackish lines, with a more distinct black mark near the base, with two imperfect black ringlets, and with the usual ψ, which is indistinct. Hind wings cinereous, with two bands and the border darker. Length of the body 5 lines; of the wings 14 lines.

a. United States. Presented by E. Doubleday, Esq.

26. Acronycta grisea.

Cinerea; abdomen album; alæ anticæ breviusculæ latiusculæ, apud marginem exteriorem vix obliquæ annulis duabus discalibus, vitta late interrupta fasciisque duabus nigris, lituris duabus ψ distinctis, fascia interiore undulata interrupta, exteriore angulosa.

Noctua grisea, *Barnston, MSS.*

Cinereous. Abdomen and hind wings white. Fore wings rather short and broad, hardly oblique along the exterior border, with two irregular black discal ringlets, with a widely interrupted black stripe, and with two black bands, each of which forms a distinct ψ, where it traverses the stripe; interior band undulating, interrupted; exterior band zigzag. Length of the body 5—6 lines; of the wings 14—16 lines.

a—c. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

Group 2.

Like the third European group.

27. Acronycta hastulifera.

Cana; alæ anticæ fusco conspersæ, annulis duobus discalibus nigris, fasciis duabus angulosis albis nigro marginatis, guttis marginalibus nigris, litura ψ vix determinata, posticæ cinerascentes fascia obscuriore.

Phalæna hastulifera, *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia*, ii. 183, pl. 92.
Acronycta hastulifera, *Guén. Ann. Soc. Ent. Fr.* i. 47, 57.
a, b. New York. Presented by E. Doubleday, Esq.

28. Acronycta Acericola.

Canescens; alæ anticæ cinereo nebulosæ, fasciis duabus undulatis albidis, lineolis, annulo discali guttisque marginalibus fuscis; posticæ margine lato cinerascente.

Noctua Aceris, *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia*, ii. pl. 93.
Acronycta Acericola, *Guén. Noct.* i. 48, 59.
Georgia, Virginia.

29. Acronycta rubricoma.

A. Aceris *simillima. Larva omnino diversa.*

Acronycta rubricoma, *Guén. Noct.* i. 48, 60.
Acronycta Acericola?
North America.

30. Acronycta impleta.

Cana; caput et thorax nigro parce conspersa; alæ anticæ lineis nonnullis transversis incompletis undulatis, annulis duobus incompletis discalibus strigisque apud marginem interiorem cuneatis nigris, strigis duabus posticis latis fuscis; posticæ cinereæ, marginibus fuscescentibus.

Hoary. Head and thorax slightly speckled with black. Fore wings with several incomplete undulating black transverse lines, with two incomplete black discal ringlets, and with cuneiform black streaks by the interior border, near which there are two broad brown streaks. Hind wings cinereous, with brownish borders. Length of the body 7 lines; of the wings 18 lines.

a. ——?

31. Acronycta contacta.

Cinerea; abdomen canum; alæ anticæ nitentes, annulis duo incompletis discalibus strigisque apud marginem exterior cuneatis confluentibus nigricantibus; posticæ pallide cine fascia obscuriore.

Cinereous. Abdomen hoary. Fore wings shining, with t imperfect blackish discal ringlets, and with some slight black marks, which are cuneiform, and form a row along the exterior bo der, on which they are confluent. Hind wings pale cinereous, wi a darker band. Length of the body 8 lines; of the wings lines.

a, b. St. Martin's Falls, Albany River, Hudson's Bay. Presente by Dr. Barnston.

Group 3.

Alæ anticæ canæ, strigis parvis discalibus guttisque marginalibus nigris; posticæ albæ.

Colour hoary. Fore wings with minute black discal streak and with black marginal dots. Hind wings white.

32. Acronycta oblinita.

Albida; alæ anticæ nigro conspersæ, guttis discalibus et marginalibus nigris; posticæ albæ, guttis marginalibus fuscis.

Phalæna oblinita, *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia*, ii 187, pl. 94.
Acronycta oblinita, *Guén. Noct.* i. 49, 61.

a—d. New York. Presented by E. Doubleday, Esq.
e, f. Georgia. From Mr. Milne's collection.
g. Nova Scotia. From Lieut. Redman's collection.

Group 4.

Like the fourth European group.

33. Acronycta innotata.

Albida; alæ anticæ litura discali, maculis costalibus fasciisque duabus angulosis incompletis guttisque marginalibus nigris, fascia interiore nonnunquam subobsoleta, exteriore albo marginata; posticæ albæ.

cronycta innotata, *Guén. Noct.* i. 50, 64.

—*d.* Trenton Falls, New York. Presented by E. Doubleday Esq.

Group 5.

Like the sixth European group.

34. ACRONYCTA BRUMOSA.

Mas. *Fusco-cinerea, nigro varia; abdomen pallide cinereum; alæ anticæ albo variæ, annulo discali albo; posticæ albæ, margine venisque exterioribus fuscis.*

cronycta brumosa, *Guén. Noct.* i. 52, 68.

. Florida. Presented by E. Doubleday, Esq.

35. ACRONYCTA HAMAMELIS.

Fœm. *Cinereo-fusca; abdomen cinereum; alæ anticæ annulo discali albo, lineis transversis angulosis nigris, marginibus albo variis; posticæ fuscescentes, fascia saturatiore.*

cronycta hamamelis, *Guén. Noct.* i. 52, 69.

This may be the female of *A. brumosa.*

. United States. Presented by E. Doubleday, Esq.

36. ACRONYCTA SUPERANS.

Cinerea; alæ anticæ albæ, fusco conspersæ et plagiatæ, lituris discalibus, lineis transversis angulosis, vitta postica guttisque marginalibus nigris, macula postica basali lutea; posticæ fuscescentes, macula fasciaque obscurioribus.

cronycta superans, *Guén. Noct.* i. 53, 71.

. New York. Presented by E. Doubleday, Esq.

37. Acronycta clarescens.

Pallide cinerea; abdomen et alæ posticæ pallide fuscescentia; alæ anticæ linea basali, fasciis undulatis duplicatis, annulis duobus discalibus guttisque marginalibus nigris.

Acronycta clarescens, *Guén*, *Noct.* i. 54, 73.

a—c. Trenton Falls, New York. Presented by E. Doubleday, Esq.
d. Nova Scotia. From Lieut. Redman's collection.

38. Acronycta longa.

A. Rumicis *et* A. auricoma *affinis; alæ anticæ oblongæ angustæ, atomis lineisque nigricantibus; posticæ albido-cinereæ, venis obscurioribus.*

Acronycta longa, *Guén. Noct.* i. 54, 74.

North America.

Var.? *Albida; thorax nigro conspersus; abdomen canum; alæ anticæ sat angustæ, nigro conspersæ et ex parte nebulosæ, fasciis undulatis albis, annulis duobus discalibus nigris; posticæ subcinereæ.*

Var.? Whitish. Thorax speckled with black. Abdomen hoary. Fore wings rather narrow, speckled, and partly shaded with black, which is interrupted by undulating white bands; some of the latter are incomplete, as are also the two discal black ringlets. Hind wings slightly cinereous. Length of the body 5 lines; of the wings 13 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

39. Acronycta xylinoides.

Pallide cinerea albo varia; abdomen albidum; alæ anticæ lineis transversis lanceolatis, annulis duobus incompletis discalibus lituraque ψ nigris; posticæ albæ, nonnunquam subfuscescentes.

Acronycta xylinoides, *Guén. Noct.* i. 56, 77.

a, b. Florida. Presented by E. Doubleday, Esq.
c—e. United States. From Mr. Milne's collection.
f. ———?

Bombycoidæ

Group 6.

Like the seventh European group.

40. Acronycta declarata.

Nigra; thorax albo varius; abdomen cinereum; alæ anticæ nigricantes fasciis quatuor angulosis albis nigro marginatis, annulis duobus albis; posticæ canæ, apud marginem exteriorem nigrum fuscescentes.

Black. Thorax with some white marks. Abdomen cinereous. Fore wings blackish, with four irregular zigzag white black-bordered bands, and with two white ringlets, of which the exterior one is much brighter and more conspicuous than the interior one. Hind wings hoary, brown towards the exterior border, which is black. Length of the body 6 lines; of the wings 16 lines.

Canada. In Mr. Saunders' collection.

41. Acronycta impressa.

Albida; thorax nigro conspersus; alæ anticæ sat angustæ, punctis nigris conspersæ et trimaculatæ; posticæ cinereæ, basi albidæ.

Whitish. Thorax speckled with black. Fore wings rather narrow, thickly speckled with black; the specks in some parts confluent, and forming three large diffuse black spots. Hind wings cinereous, whitish towards the base. Length of the body 6 lines; of the wings 14 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

42. Acronycta insita.

Cana; alæ guttis marginalibus nigris; anticæ apud costam nigro notatæ, fasciis guttularibus annulisque duobus discalibus incompletis nigricantibus, fascia exteriore e lunulis nigris; posticæ albidæ, gutta fasciaque nigricantibus.

Hoary. Wings with black dots along the exterior border. Fore wings with blackish marks along the costa, with some imperfect dotted blackish bands, with two incomplete blackish discal ringlets, and with an exterior undulating more complete band composed of

black lunules. Hind wings whitish, with a blackish dot and discal band, which are most apparent beneath. Length of the body 7 lines; of the wings 18 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

43. Acronycta fasciata.

Cinerea, nigro varia; abdomen canum; alæ anticæ strigis nonnullis discalibus latis abbreviatis, fasciis nonnullis undulosis annulisque duobus discalibus nigris, ciliis nigro-guttatis; posticæ pallide fuscæ, basi nonnunquam albidæ.

Noctua fasciata, *Barnston, MSS.*

Cinereous, varied with black. Abdomen hoary. Fore wings with some broad short black streaks in the disk, with some slight undulating black bands, and with two incomplete black discal ringlets; ciliæ with black dots. Hind wings pale brown, sometimes whitish towards the base. Length of the body 5—6 lines; of the wings 14—16 lines.

a—e. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

44. Acronycta mixta.

Albida; thorax nigro varius; abdomen canum; alæ latiusculæ; anticæ nigro conspersæ, fasciis plurimis undulatis ex parte incompletis, maculis marginalibus annulisque duobus subobsoletis discalibus nigris.

Noctua mixta, *Barnston, MSS.*

Whitish. Thorax varied with black. Abdomen hoary. Wings rather broad. Fore wings speckled with black, and adorned with numerous undulating partly incomplete black bands; a row of black spots along the exterior border; two very indistinct black discal ringlets. Length of the body 6—7 lines; of the wings 14—16 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

West Indies.

Group 1.

Distinct from all the preceding groups.

45. Acronycta distinguenda.

Albida; tarsi nigro fasciati; alæ anticæ fuscæ conspersæ, lineis duabus angulosis duplicatis transversis, strigis exterioribus lanceolatis, lituris duabus connexis arcuatis discalibus lunulisque marginalibus nigris; posticæ marginibus latissimis fuscis.

Whitish. Tarsi with black bands. Fore wings speckled with brown, adorned with two double zigzag transverse black lines, with an exterior row of lanceolate black streaks, with two black curved discal marks, which are connected in the middle, and with a row of black semicircles along the exterior border. Hind wings white, with very broad brown borders. Length of the body 9 10 lines; of the wings 18—20 lines.

a, b. St. Domingo. From Mr. Tweedie's collection.

Africa.

Group 1.

Like the fourth European group.

46. Acronycta pachycephala.

A. megacephala *paullo minor; palpi crassiores, nigro vix notatæ; abdomen incrassatum, non depressum nec apud latera villosum; alæ posticæ vena mediana optime determinata.*

Acronycta pachycephala, *Guén. Noct.* i. 50, 63.

Senegal.

Asia.

Group 1.

Like the fourth European group.

47. Acronycta pruinosa.

Albida; thorax nigro fasciatus; alæ anticæ lineis transversis undulatis interruptis, lituris discalibus maculisque costalibus nigris; posticæ fascia margineque cinerascentibus.

Acronycta pruinosa, *Guén. Noct.* i. 53, 72.

Silhet. Java.

Group ?

48. Acronycta ? lutea.

Alæ anticæ cinereo fuscoque variæ, strigis undatis nigris et macula alba ad marginem interiorem; posticæ luteo-flavæ, fascia intramarginali nigra.

Acronycta lutea, *Bremer und Grey, Beitr. zur Schmett. Fauna der Nordlichen China's*, 17, 85.

North China.

Genus 4. SIMYRA.

Corpus robustum. Proboscis inconspicua. Palpi breves, pilosi. Antennæ graciles. Abdomen alas posticas plus minusve superans. Pedes vix validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat angustæ aut mediocriter latæ; anticæ apud costam vix convexæ, apice acuminatæ, margine exteriore sat obliquo.

Simyra, *Ochs. Schmett. Eur.* iv. 81; *Treits.; Steph. Ill. Brit. Ent. Haust.* 81; *Guénée, Ann. Soc. Ent. Fr.* vi. 341.

Leucania, p., *Boisd.*; *Meig.*
Symira, p., *Hübn. Verz. Schmett.*
Asema, *Sodoff, Bull. Soc. Imp. Mosc.* xiv.
Symira, *Herr.-Schæff. Eur. Schmett.* ii. 178.

Body stout. Proboscis not visible. Palpi short, pilose. Antennæ slender. Abdomen extending more or less beyond the hind wings. Legs hardly stout; hind tibiæ with four rather long spurs. Wings rather narrow or of moderate breadth. Fore wings hardly convex in front, acuminated at the tips, rather oblique along the exterior border; first, second and third inferior veins almost contiguous at the base; fourth remote. *Male.*—Antennæ slightly pectinated. *Female.*—Antennæ simple.

Group 1.

Palpi caput paullo superantes. Abdomen alas posticas dimidio superans. Alæ sat angustæ; anticæ apud costam perobliquæ.

Palpi extending a little beyond the head. Abdomen extending for half its length beyond the hind wings. Wings rather narrow. Fore wings very oblique along the exterior border.

1. Simyra dentinosa.

Cinerea; alæ albidæ, anticæ areolis fusco strigatis.

Noctua dentinosa, *Frey. Neu. Beit. Schmett.* iii. 97, pl. 263.
Simyra dentinosa, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 426, pl. 37. *Guén. Ann. Soc. Ent. Fr.* vi.; *Noct.* i. 61, 82. *Eversm. Faun. Volgo Ural.* 263. *Boisd. Ind. Méth.* 136, 1090.
Symira tendinosa, *Friv.*; *Herr.-Schæff. Eur. Schmett.* ii. 179, 8, pl. 76, 77, f. 393, 394.

Turkey, Ural district. Oremburg, Sarepta.

a, b. Europe? From M. Becker's collection.

Bombycoidae.

Group 2.

Palpi caput non superantes. Abdomen alas posticas paullo superans. Alæ anticæ sat angustæ, subfusiformes, apud marginem exteriorem perobliquæ.

Palpi not extending beyond the head. Abdomen extending a little beyond the hind wings. Fore wings rather narrow, nearly fusiform, very oblique along the exterior border.

2. SIMYRA NERVOSA.

Alba; abdomen subtestaceo-albidum; alæ pallide testaceæ; anticæ punctis nigris conspersæ, basim versus albo strigatæ, venis exterioribus albidis, cinereo marginatis; posticæ ciliis albis.

Phalæna-Noctua nervosa, *Gmel. ed. Syst. Nat.* i. 5, 2532, 982.
——— ———, *Engr. Pap. d'Eur.* 367, a, b.
Noctua nervosa, *Wien. Verz.* 85, 12. *Fabr. Mant. Ins.* ii. 139, 37; *Ent. Syst.* iii. 2, 23, 49. *Bork. Eur. Schmett.* iv. 715, 315. *Hübn. Samml. Eur. Schmett. Noct.* pl. 47, f. 226.
Simyra nervosa, *Treit. Schmett. Eur.* v. 2, 283, 2; *Suppl.* x. 85. *Dup. Hist. Nat. Lép. Fr.* vii. 339, pl. 120, f. 8. *Frey. Neu. Beit. Schmett.* pl. 101. *Boisd. Ind. Méth.* 136, 1089. *Guén. Noct.* i. 61, 83.
Noctua oxyptera, *Esp. Schmett* iv. pl. 130, f. 6.
Leucania nervosa, *Meig. Syst. Besch. Eur. Schmett.* iii. 166, 2, pl. 108, f. 4.
Symira nervosa, *Hübn. Verz. Schmett.* 240, 2385. *Herr.-Schæff. Eur. Schmett.* ii. 179, 9.

a. Europe. From M. Becker's collection.

3. SIMYRA TOROSA.

Argenteo-alba; alæ lineis cinereis; posticæ basi cinerascentes.

Symira argentacea? *Herr.-Schæff. Schmett. Eur.* ii. 179, 7; ii. *Noct.* pl. 75, f. 387, 388.
Simyra torosa, *Guén. Noct.* i. 62, 84.

Sarepta.

Group 3.

Palpi caput non superantes. Abdomen alas posticas paullo superans. Alæ mediocriter latæ; anticæ apud marginem exteriorem mediocriter obliquæ.

Palpi not extending beyond the head. Abdomen extending a little beyond the hind wings. Wings moderately broad. Fore wings moderately oblique along the exterior border.

4. Simyra venosa.

Alba; thorax vix cervino suffusus; alæ anticæ pallidissime cervinæ, fusco obsolete punctatæ, lineis duabus discalibus fuscescentibus, punctis marginalibus nigris.

——— ———, *Deg. Ins.* ii. 415, pl. 7.
Noctua venosa, *Bork. Eur. Schmett.* iv. 116, 318.
Simyra venosa, *Treit. Schmett. Eur.* v. 281, 2; *Suppl.* x. 84. *Dup. Hist. Nat. Lep. Fr.* viii. 343, pl. 120, f. 7. *Steph. Ill. Brit. Haust.* iii. 82, 2; *Cat. Brit. Lep.* 138, 1. *Westw. & H. Brit. Moths*, i. 220, pl. 48, f. 3. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 62, 85.
Leucania venosa, *Meig. Syst. Besch. Eur. Schmett.* iii. 166, 1, pl. 108, f. 3. *Boisd. Ind Méth.* 1, 136, 1092.
Noctua degener, *Sepp, Ins.* ii. pl. 3, f. 429. *Hübn. Eur. Schmett. Noct.* pl. 81, f. 380.
Noctua atomina, *Haw. Lep. Brit.* 175, 43.
Symira degener, *Hübn. Verz. Schmett.* 240, 2386.
Symira venosa, *Herr.-Schæff. Eur. Schmett.* ii. 180, 9.

a—g. England. From Mr. Stephens' collection
h. England. From Mr. Carter's collection.
i—l. Europe. From M. Becker's collection.

Subdiv. 2.

A. Palpi subobsoleti. - - Fam. 2. Glottulidæ, *Guén.*
B. Palpi distincti.
  A. Alæ pallidæ. - - - Fam. 1. Leucanidæ, *Guén.*
  B. Alæ obscuræ aut variegatæ.
    a. Proboscis longa. Palpi ascendentes. Pedes validi. Alæ obscuræ.

a. Tibiæ non spinosæ. Alæ anticæ deflexæ.
i. Alæ anticæ apices versus obscuriores.
Fam. 3. APAMIDÆ, *Guén.*
ii. Alæ anticæ concolores, ut lineis maculisque distinctis.
Fam. 4. CARADRINIDÆ, *Guén.*
b. Tibiæ sæpe spinosæ. Alæ anticæ planæ, non deflexæ.
Fam. 5. NOCTUIDÆ, *Guén.*
B. Alæ coloribus variis.
a. Palpi hirti, breves, subrecti. Abdomen sæpissime glabrum. Alæ anticæ linea subterminali recta, macula reniformi nigro conspurcata.
Fam. 6. ORTHOSIDÆ, *Guén.*
b. Palpi robusti, ascendentes. Abdomen sæpissime cristatum. Alæ anticæ linea subterminali fracta.
Fam. 8. HADENIDÆ, *Guén.*
c. Alæ anticæ lineis medianis non dentatis, trapezium fingentibus. - - - Fam. 7. COSMIDÆ, *Guén.*
C. Corpus elongatum. Prothorax sæpissime pilis erectis. Pedes mutici. Alæ anticæ oblongæ, lineis strigisque elongatis.
Fam. 9. XYLINIDÆ, *Guén.*
D. Diurnæ. Antennæ simplices. Pedes sæpissime spinis aut unguibus armati. Alæ sæpissime nigro notatæ.
Fam. 10. HELIOTHIDÆ, *Guén.*

Fam. 1. LEUCANIDÆ.

Pallidæ, sæpius stramineæ, in herbis per diem latentes. Thorax lævis, nunquam cristatus. Alæ anticæ tectiformes, lineis transversis maculisque ordinariis sæpius nullis. Larva 16 poda, glaberrima, lineata, plantas humiles frascens. Metamorphosis hypogea.

Nonagridi, *Guénée*, *Ann. Soc. Ent. Fr.* vi. 326.
Leucanides, *Boisd. Ind. Méth.* 131.
Ortbosidæ, p., *Herr.-Schæff. Eur. Schmett.* ii. 188.
Leucanidi, p., *Guén. Ann. Soc. Ent. Fr.* vi. 331.
Caradrinidi, p., Nonagridi et Leucanidi, *Steph. Cat. Brit. Lep.* 116, 120, 123.
Leucanidæ, *Guén. Noct.* i. 65.

Body generally stout, occasionally slender. Proboscis and palpi short. Antennæ simple or nearly so. Fore wings mostly rather narrow, very generally pale and without the usual marks. Hind wings most often white.

Leucania

Antennæ sat longæ.
A. Corpus gracile.
a. Abdomen alas posticas triente superans.
8. Cœnobia, *Steph.*
b. Abdomen alas posticas non superans. 18. Deinopa, *Walk.*
c. Abdomen alas posticas paullo superans.
a. Alæ anticæ apud costam rectæ. - 1. Oria, *Hübn.*
b. Alæ anticæ apud costam subconvexæ.
i. Alæ anticæ apice obtusæ.
* Antennæ graciles. - - 7. Senta, *Steph.*
** Antennæ sat validæ. - 9. Carvanca, *Walk.*
ii. Alæ anticæ apice acutæ. - 6. Meliana, *Guén.*
B. Corpus sat gracile. - - 12. Proxenus, *Herr.-Schæff.*
C. Corpus robustum aut sat robustum.
a. Alæ anticæ non hamatæ.
a. Caput palpis non arcte applicatis.
i. Palpi caput vix superantes. - 2. Diatabaxia, *Hübn.*
ii. Palpi caput superantes.
* Antennarum articulus 2us 3o quadruplo longior.
† Caput mediocre.
‡ Abdomen non elongatum.
§ Caput antice non fasciculatum.
× Alæ anticæ latiusculæ, saturate tinctæ.
3. Mythimna, *Ochs.*
×× Alæ anticæ pallidæ, non latiusculæ.
4. Leucania, *Ochs.*
§§ Caput anticum sæpissime fasciculatum.
10. Nonagria, *Ochs.*
‡‡ Abdomen alas posticas dimidio superans.
17. Obrima, *Walk.*
†† Caput magnum. - 11. Aiteta, *Walk.*
** Antennarum articulus 2us 3o vix triplo longior.
5. Sesamia, *Guén.*
b. Caput palpis arcte applicatis. - 15. Chasmina, *Walk.*
b. Alæ anticæ subhamatæ.
a. Palpi porrecti. - - - 14. Eschata, *Walk.*
b. Palpi ascendentes. - - 16. Contrebia, *Walk.*
Antennæ breves. - - - - 13. Timora, *Walk.*
Antennæ valde robustæ. - - 19. Leucophlebia, *Westw.*

Genus 1. ORIA.

Corpus gracile. Proboscis brevis. Palpi breves, graciles, oblique ascendentes; articulus 3us minutus, acuminatus. Antennæ simplices, graciles, longiusculæ. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ sat latæ, ciliis latiusculis. Alæ anticæ apud costam rectæ, apice subacuminatæ, margine exteriore mediocriter obliquo.

Synia, *Duponch. Cat.; Guén. Noct.* i. 66; *Herr.-Schæff. Eur. Schmett* ii. 240.
Leucania, p., *Treit.; Boisd.; Guén.* (olim.)
Oria, *Hübn. Verz. Schmett.* 240. *Steph. Cat. Brit. Lep.*
Simyra, *Steph. Ill. Brit. Ent. Haust.*

Body slender. Proboscis short. Palpi short, slender, obliquely ascending; third joint minute, acuminated. Antennæ simple, slender, rather long. Abdomen extending a little beyond the hind wings. Legs slender; hind tibiæ with four moderately long spurs. Wings moderately broad; ciliæ rather broad. Fore wings straight in front, slightly acuminated at the tips, moderately oblique along the exterior border; first, second and third veins approximate at the base; fourth rather remote.

1. Oria musculosa.

Pallide testacea; alæ anticæ pallidissime cervinæ, vittis duabus albidis; posticæ cinerascentes.

Noctua musculosa, *Hübn. Samml. Eur. Schmett.* pl. 78, f. 363.
Oria musculosa, *Hübn. Verz. Schmett.* 240, 2388.
Leucania musculosa, *Treit. Schmett. Eur.* ii. 286. *Boisd. Ind Méth.* 132, 1048. *Guén. Ann. Soc. Ent. Fr.* vi. 237. *Westw & H. Brit. Moths*, i. pl. 48, f. 2.
Synia musculosa, *Dup. Hist. Nat. Lép. Fr.* iv. 341, pl. 120. *Guén Noct.* i. 67, 86. *Herr.-Schæff. Eur. Schmett.* ii. 240, 177.
Noctua succinea? *-Esp. Schmett.* 190, f. 3.
Noctua nervosa, *Haw. Lep. Brit.* 44.
Simyra nervosa, *Steph. Ill. Brit. Haust.* iii. 82.

a, *b*. England. From Mr. Stephens' collection.

Leucania.

2. Oria maculata.

Alba; alæ anticæ testaceæ, fasciis interruptis obliquis albis, striga discali maculisque ciliaribus fuscis; posticæ apud margines fuscescentes.

Leucania? maculata, *Eversm. Faun. Volgo. Ural*, 267.
Synia maculata, *Guén. Noct.* i. 67, 87.

Ural Region.

a, b. Europe. From M. Becker's collection.

Genus 2. DIATARAXIA.

Corpus sat robustum. Proboscis breviuscula. Palpi breves, pilosi, caput vix superantes; articulus 3us 2i dimidio brevior. Antennæ *maris* subserratæ. Abdomen alas posticas superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ breviusculæ, sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore vix obliquo.

Mythimna, p., *Ochs.; Treit.; Dup.; Guén.*
Diataraxia, p., *Hübn.*
Leucania, p., *Herr.-Schæff.*
Laperina, p., *Boisd.*

Body rather stout. Proboscis rather short. Palpi short, pilose, hardly extending beyond the head; third joint elongate-conical, less than half the length of the second. Antennæ slightly serrated in the male. Abdomen extending rather beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings rather short and narrow. Fore wings straight in front, somewhat rounded at the tips, hardly oblique along the exterior border; first, second and third inferior veins rather near together at the base; fourth rather remote.

1. Diataraxia imbecilia.

Pallide cervina; alæ anticæ litura transversa hamata pallidiore, lineisque transversis undulatis obscurioribus; posticæ fuscæ, ciliis cervinis.

Noctua imbecilia, *Fabr. Ent. Syst.* iii. 2, 340. *Hübn. Samml. Eur. Schmett. Noct.* 555, mas.

Mythimna imbecilia, *Treit. Schmett. Eur.* ii. 193; *Suppl.* 65 *Frey. Neu. Beit. Schmett.* ii. pl. 153. *Eversm. Faun. Volga Ural*, 231. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 363, pl. 33 *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 69, 88.
Noctua alpina, *Hübn. Samml. Eur. Schmett. Noct.* pl. 156, f. 728, 729, fœm.
Mythimna alpina, *Frey. Beitr.* pl. 36, f. 2.
Noctua (Mythimna) alpina, *Meig. Syst. Besch. Eur. Schmett.* iii. 153, 129, pl. 105, f. 13.
Mythimna disparilis, *Ochs. Syst. Gloss.*
Mythimna nexa, *Dup. Hist. Nat. Lép. Fr.* iii. 62, pl. 104.
Luperina imbecilla, *Boisd. Ind. Méth.* 116, 898.
Noctua aliena, *Hübn. Noct.* 441.
Diataraxia aliena, *Hübn. Verz. Schmett.* 219, 2200.
Leucania imbecilla, *Herr.-Schæff. Eur. Schmett.* ii. 239, 174.

France. Styria. Hungary. South Russia.

Genus 3. MYTHIMNA.

Corpus robustum. Proboscis breviuscula. Palpi validi, pilosi, caput sat longe superantes; articulus 3us gracilis, longi-conicus, 2i quadrante brevior. Antennæ sat validæ, subserratæ. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ subacuminatæ, apud costam subrectæ, margine exteriore vix obliquo. Larva cylindrica, glabra, cinereo-albida, fusco multilineata, graminibus nocte vescens. Metamorphosis subterranea.

Mythimna, Aletia et Hyphilare, *Hübn. Verz. Schmett.* 238.
Mythimna, Leucania, p., *Treits.; Boisd.; Guénée, Ann. Soc. Ent. Fr.* vi. 336: *Noct.* i. 68; *Herr.-Schæff. Eur. Schmett.* ii. 227.
Mythimna et Segetia, *Steph.*
Mithimna, *Sodoffsky, Bull. Mosc.* 1837.

Body stout. Proboscis rather short. Palpi stout, pilose, extending some distance beyond the head; third joint slender, elongate-conical, less than one-fourth of the length of the second. Antennæ rather stout, minutely serrated. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings rather broad. Fore wings almost straight in front, slightly acuminated at the tips, very slightly oblique along the exterior border; inferior veins with the usual structure.

Leucania.

Europe.

Group 1.

Alæ anticæ sat acutæ, lineis duabus exterioribus obliquis undulatis transversis, margine exteriore mediocriter obliquo.

Fore wings with two exterior oblique undulating transverse lines; tips rather acute; exterior border moderately oblique.

1. Mythimna conigera.

Luteo-cervina; abdomen pallide testaceum, basi albidum; alæ anticæ lineis duabus obliquis transversis (interiore flexa) fuscis, maculis duabus discalibus albis; posticæ albidæ, margine lato pallide ferrugineo.

Phalæna-Noctua conigera, *Gmel. ed. Syst. Nat.* i. 5, 2562, 603.
——— ———, *Engr. Pap. d'Eur.* 492.
Noctua conigera, *Wien. Verz.* 84, 3. *Fabr. Mant. Ins.* ii. 177, 274; *Ent. Syst.* iii. 2, 113, 341. *Bork. Eur. Schmett.* iv. 692, 303. *Hübn. Samml. Eur. Schmett. Noct.* pl. 46, f. 222; *Beitr.* pl. 4, Z. *Haw. Lep. Brit.* 229.
Noctua (Mythimna) conigera, *Meig. Syst. Besch. Eur. Schmett.* iii. 152, 128, pl. 108, f. 2.
Mythimna conigera, *Treit. Schmett. Eur.* v. 190, 6. *Dup. Hist. Nat. Lép. Fr.* vii. 60, pl. 104, f. 3. *Westw. & H. Brit. Moths*, i. 142, pl. 29, f. 3, 4. *Steph. Ill. Brit. Haust.* ii. 151; *Cat. Brit. Lep.* 116.
Leucania conigera, *Boisd. Ind. Méth.* 131, 1044. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 72, 90. *Herr.-Schæff. Eur. Schmett.* ii. 239, 172.
Noctua floccida, *Esp. Schmett.* iv. pl. 23, f. 5.
Aletia conigera, *Hübn. Verz. Schmett.* 239, 2372.

a, b. England. From Mr. Haworth's collection.
c—g. England. From Mr. Stephens' collection.
h—k. England.
l—o. Europe. From M. Becker's collection.

2. Mythimna vitellina.

Pallide fulva; abdomen albido-testaceum; alæ anticæ lineis tribus transversis undulatis punctisque saturatioribus, macula discali fusca; posticæ albidæ.

——— ———, *Engr. Pap. d'Eur.* 506, a, b.

Noctua vitellina, *Hübn. Samml. Eur. Schmett. Noct.* pl. 81, f. 379; pl. 128, f. 589.

Xanthia vitellina, *Treit. Schmett. Eur.* v. 2, 356, 9; *Suppl.* x. 88.

Leucania vitellina, *Dup. Hist. Nat. Lép. Fr.* vii. 475, pl. 130, f. 5. *Boisd. Ind. Méth.* 132, 1047. *Guén. Ann. Soc. Ent. Fr.* vi. *Noct.* i. 73, 92.

Noctua (Xanthia) vitellina, *Meig. Syst. Besch. Eur. Schmett.* iii. 160, 144, pl. 107, f. 15.

Aletia vitellina, *Hübn. Verz. Schmett.* 239, 2371.

a—c. Europe. From M. Becker's collection.

Group 2.

Alæ anticæ vix acutæ, linea una exteriore obliqua transversa, margine exteriore subobliquo.

Fore wings with one exterior oblique transverse line; tips hardly acute; exterior border very slightly oblique.

3. Mythimna turca.

Ferruginea; thorax postice et abdomen basi pallidiora; alæ anticæ fusco confertim conspersæ, lineis duabus transversis nigricantibus, litura intermedia transversa testacea nigricante marginata; posticæ basi pallidiores, linea obliqua nigricante.

——— ———, *Engr. Pap. d'Eur.* 497.

Phalæna-Noctua turca, *Linn. Syst. Nat.* 2, 847, 140; *Faun. Suec.* 1221. *Gmel. ed. Syst. Nat.* i. 5, 2561, 140. *Bjerk. Act. Stockh.* 1779, 2.

Noctua turca, *Wien. Verz.* 84, 2. *Fabr. Sp. Ins.* ii. 237, 135; *Mant. Ins.* ii. 177, 273; *Ent. Syst.* iii. 2, 113, 339. *Esp. Schmett.* iv. pl. 122, f. 5, 6. *Bork. Eur. Schmett.* iv. 688, 301. *Hübn. Samml. Eur. Schmett. Noct.* pl. 45, f. 218. *Haw. Lep. Brit.* 266.

Noctua (Mythimna) turca, *Meig. Syst. Besch. Eur. Schmett.* iii. 152, 127, pl. 105, f. 10.

Mythimna turca, *Treit. Schmett. Eur.* v. 2, 181, 3; *Suppl.* 72. *Dup. Hist. Nat. Lép. Fr.* vii. 56, pl. 104, f. 1. *Frey. Beit. Ges. Eur. Schmett.* iii. pl. 122, f. 92. *Ent. Zeit. Stett.* ii. 96. *Steph. Ill. Brit. Haust.* ii. 150; *Cat. Brit. Lep.* 116. *Westw. & H. Brit. Moths*, i. 141, pl. 29, f. 1, 2. *Boisd. Ind. Méth.* 131, 1043.

Leucania turca, *Guén. Ann. Soc. Ent. Fr.* vi. 237. *Noct.* i. 73, 93. *Herr.-Schæff. Eur. Schmett.* ii. 239, 173.

Noctua Volupia, *Naturf.* ix 123.

Aletia turca, *Hübn. Verz. Schmett.* 239, 2373.

e—k. England. From Mr. Stephens' collection.

l, m. England.

n, o. Black Forest. Presented by Mr. Muff.

p—r. Europe. From M. Becker's collection.

s—w. Europe.

4. Mythimna lithargyria.

Pallide cervina; abdomen testaceo-albidum; alæ anticæ lineis duabus incompletis transversis punctisque exterioribus nigris, gutta discali alba nigro submarginata; posticæ pallidiores, basi albidæ.

——— ———, *Engr. Pap. d'Eur.* 499, a—h.

Noctua lithargyria, *Esp. Schmett.* iv. pl. 124, f. 6. *Bork. Eur. Schmett.* iv. 696, 305. *Hübn. Samml. Eur. Schmett. Noct.* pl. 46, f. 225.

Mythimna lithargyria, *Treit. Schmett. Eur.* v. 2, 183, 4. *Dup. Hist. Nat. Lép. Fr.* vii. 100, pl. 107, f. 1. *Steph. Ill. Brit. Ent. Haust.* ii. 151. *Westw. & H. Brit. Moths*, i. 144, pl. 29, f. 6.

Leucania lithargyria, *Boisd. Ind. Méth.* 132, 1046. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 75, 97. *Herr.-Schæff. Eur. Schmett.* ii. 238, 170.

Noctua (Mythimna) lithargyria, *Meig. Syst. Besch. Eur. Schmett.* iii. 153, 130, pl. 105, f. 11.

Hyphilare lithargyrea, *Hübn. Verz. Schmett.* 239, 2375.

Mus. Mythimna grisea, *Steph. Ill. Brit. Ent. Haust.* ii. 150. *Westw. & H. Brit. Moths*, i. 144, pl. 29, f. 5.

Var. *Alæ subtus minus micaceæ; abdomen* maris *penicillo nullo atro basali.*

Var. Anargyria, *Boisd. Ind. Méth.* 132.

a—t. England. From Mr. Stephens' collection.
v, u. Europe. From M. Becker's collection.

5. MYTHIMNA ALBIPUNCTA.

Cervina; abdomen testaceum; alæ anticæ lineis transversis undulatis obscurioribus subobsoletis quttaque discali alba; posticæ pallide fuscescentes ciliis albidis.

Phalæna-Noctua albipuncta, *Gmel. ed. Syst. Nat.* i. 5, 2562, 1124.
——— ———, *Engr. Pap. d'Eur.* 49 a, a—d. *Roës. Ins. Bel.* iii. pl. 71, f. 11, 12.
Noctua albipuncta, *Wien. Verz.* 84, Q, 4. *Fabr. Mant. Ins.* ii. 178, 275; *Ent. Syst.* iii. 2, 114, 342. *Scriba, Beit. Ins. Gesch.* pl. 12, f. 8—10. *Hübn. Samml. Eur. Schmett. Noct.* pl. 46, f. 223. *Bork. Eur. Schmett.* iv. 693, 104.
Mythimna albipuncta, *Treit. Schmett. Eur.* v. 2, 187, 5.
Leucania albipuncta, *Boisd. Ind. Méth.* 131, 1045. *Guén. Ann. Soc. Ent. Fr.* vi.; *Noct.* i. 75, 98. *Herr.-Schæff. Eur. Schmett.* ii. 238, 171.
Noctua (Mythimna) albipuncta, *Meig. Syst. Besch. Eur. Schmett.* iii. 154, 131, pl. 105, f. 12.
Hyphilare albipuncta, *Hübn. Verz. Schmett.* 239, 2374.

a. Europe. From M. Becker's collection.

North America.

Group I.

Palpi porrecti, caput longe superantes; articulus 3us elongatus, lanceolatus, 2i dimidio vix brevior. Alæ latiusculæ; anticæ apud costam rectæ, apice vix angulatæ, margine exteriore vix obliquo.

Palpi porrect, extending far beyond the head; third joint elongate, lanceolate, hardly half the length of the second. Wings rather broad. Fore wings straight in front, hardly angular at the tips, hardly oblique along the exterior border.

This species hardly belongs to the *Leucanidæ*, but should be transferred to the 2nd division of *Noctuites* with which it agrees in the length of the terminal joint of the palpi, and in other characters.

Leucanidæ

6. Mythimna? littera.

Ferruginosa; abdomen cervinum; alæ anticæ lineis duabus transversis obliquis purpureo-albidis, costa alba, striga angulata discali argentea; posticæ pallidiores, linea obliqua obscuriore.

Leucania littera, *Guén. Noct.* i. 71, 89.

♂. Florida. Presented by E. Doubleday, Esq.

Group 2.

Like the second European group.

7. Mythimna pseudargyria.

Pallidissime cervina; abdomen cinerascens; alæ anticæ maculis duabus costalibus albidis lineis tribus transversis interruptis nigricantibus, 1a undulata, 2a duplicata guttulari, 3a guttulari; posticæ cinereæ ciliis pallidis.

Leucania pseudargyria, *Guén. Noct.* i. 74, 94.

♂—*f*. New York. Presented by E. Doubleday, Esq.

8. Mythimna obusta.

Rufo-cervina; abdomen testaceum; alæ posticæ pallide testaceæ, margine latissime cinereo-fusco.

Leucania obusta, *Guén. Noct.* i. 74, 95.

♂ United States. Presented by E. Doubleday, Esq.

9. Mythimna ebriosa.

Rubricosa; abdomen cinerascens; alæ anticæ gutta discali punctisque submarginalibus albis; posticæ cinereo-fuscæ, basi pallidiores, ciliis roseis.

Leucania ebriosa, *Guén. Noct.* i. 74, 96.

♂. United States. Presented by E. Doubleday, Esq.

10. Mythimna contraria.

Ferrugineo-rufa; abdomen testaceum; alæ anticæ subpurpurascentes, lituris discalibus nigricantibus testaceo conspersis, guttis marginalibus albidis; posticæ albæ.

Ferruginous-red. Abdomen testaceous. Fore wings with a slight purplish tinge; the usual discal mark blackish, speckled with testaceous; a row of whitish marginal dots. Hind wings white. Length of the body 6 lines; of the wings 14 lines.

a, b. New York. Presented by E. Doubleday, Esq.

11. Mythimna tripars.

Rufo-cervina, subtus pallida; abdomen canum; alæ anticæ litura discali oblonga transversa, guttis quinque exterioribus angulatis, gutta interiore guttaque basali canis fusco lineatis, costa cano conspersa fusco biguttata; posticæ canæ, marginibus pallidissime fuscis.

Reddish fawn-colour, pale beneath. Abdomen hoary. Fore wings with a hoary oblong transverse discal mark, with five exterior angular dots, with an interior dot, and with a basal dot of the same hue; these marks are interlined with brown; costa with hoary speckles, which contain two brown dots. Hind wings hoary, with very pale brown borders. Length of the body 5 lines; of the wings 12 lines.

a. United States. Presented by E. Doubleday, Esq.

12. Mythimna vetusta.

Cana; antennæ fulvæ; abdomen testaceum; alæ anticæ pallidissime testaceæ, litura discali arcuata pallide fusca, gutta interiore fusca punctisque vix distinctis exterioribus et marginalibus fuscis; posticæ albæ.

Hoary. Antennæ tawny. Abdomen testaceous, except towards the base. Fore wings very pale testaceous, with a curved pale brown discal mark, with an interior brown dot, and with the usual exterior and marginal brown points, which are indistinct. Hind wings white. Length of the body 6 lines; of the wings 14 lines.

a. Nova Scotia. From Lieut. Redman's collection.

South America.

13. Mythimna argillacea.

Mas. *Cervina; alæ apud margines fuscescentes; alæ luteo-cervinæ, lineolis transversis nigricantibus, punctisque duabus discalibus albis.*

Aletia argillacea (Noctua gemina, Heliophila lineata), *Hübn. Samml. Exot. Schmett.* ii. 32, 200, f. 399, 400.

Bahia.

Africa.

Group 1.

Like the first European group.

14. Mythimna claudicans.

Luteo-cervina; abdomen nigro conspurcatum; alæ anticæ subconspersæ, lineis duabus medianis distinctis nigricantibus, maculis duabus discalibus albis nigro marginatis; posticæ margine lato pallide ferrugineo.

Leucania claudicans, *Guén. Noct.* i. 72, 91.

Abyssinia.

Asia.

15. Mythimna? luteomaculata.

Alæ anticæ luteo-obsolete cinereoque variæ, maculis duabus rotundatis luteis cinereo pupillatis, ante marginem externum serie, punctorum nigrorum; posticæ cinereæ.

Mythimna luteomaculata, *Bremer und Grey, Beitr. zur Schmett. Fauna des Nordlichen China's*, 17, 86.

North China.

Genus 4. LEUCANIA.

Corpus robustum. Proboscis brevis. Palpi validi, pilosi, oblique ascendentes, caput superantes; articulus 3us gracilis,

longi-conicus, 2i quadrante non longior. Antennæ sat graciles. Abdomen alas posticas plus minusve superans. Pedes sat robusti; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ mediocriter latæ, anticæ sæpissime testaceæ, subacuminatæ, maculis ordinariis nullis, apud costam rectæ, margine exteriore subobliquo. Larva cylindrica, glabra, pallida, per diem latens, multilineata. Pupa terra sepulta. *Mas.*—Antennæ subserratæ. *Fœm.*—Antennæ simplices.

Leucania, p., *Ochs. Syst. Gloss. Schmett. Eur.* iv.; *Treits.*; *Meig.*; *Boisd.*; *Guénée*, *Ann. Soc. Ent. Fr.* vi. 338; *Noct.* i. 69; *Herr.-Schæff. Eur. Schmett.* ii. 227.
Symira, Calamia, et Leucania, *Hübn. Verz. Schmett.* 240, 241.
Leucania et Calamia, *Steph. Cat. Brit. Lep.* 123, 124.

Body stout. Proboscis short. Palpi stout, pilose, obliquely ascending, extending beyond the head; third joint slender, elongate-conical, about one-fourth of the length of the second, or shorter. Antennæ rather slender. Abdomen extending more or less beyond the hind wings. Legs rather stout; hind tibiæ with four moderately long spurs. Wings moderately broad. Fore wings generally testaceous, straight in front, slightly acuminated at the tips, slightly oblique along the exterior border; fourth inferior vein remote from the other three, which are nearly contiguous at the base. *Male.*—Antennæ slightly serrated. *Female.*—Antennæ simple.

Europe.

Group 1.

Alæ anticæ testaceæ, plus minusve vittatæ et lineatæ, striga aut gutta discali alba.

Fore wings testaceous or fawn-colour, with more or less stripes and lines, and with a white discal streak or dot.

Subgroup 1.

Alæ anticæ subacuminatæ, pallide cervinæ, vittis cinereis et rufescentibus, gutta discali alba, margine exteriore subobliquo; posticæ albidæ.

Fore wings pale fawn-colour, slightly pointed, very slightly oblique along the exterior border, with grayish and reddish streaks, and with a discal white dot.

1. Leucania dactylidis.

Alæ anticæ pallide fusco rubricantes, atomis obscurioribus conspersæ, puncto medio albido strigaque arcuata obsoleta punctorum fuscorum; posticæ niveæ.

Leucania dactylidis, *Ramb. Boisd. Ind. Méth.* 133, 1066. *Dup. Hist. Nat. Lep. Fr. Suppl.* iv. 226, pl. 69; ii. 231, 147. *Herr.-Schæff. Eur. Schmett.* 318; ii. *Noct.* pl. 63. *Guén. Noct.* i. 76, 99.

South France.

2. Leucania Scirpi.

Pallidissime cervina; alæ anticæ guttis discalibus lineaque exteriore e punctis, necnon punctis marginalibus nigris, gutta discali alba, striga discali margineque exteriore subfuscescentibus; posticæ albæ.

Leucania Scirpi, *Boisd. Ind. Méth.* 133, 1065. *Dup. Hist. Nat. Lep. Fr. Suppl.* iii. 349, pl. 32. *Guén. Noct.* i. 76, 100.
Leucania Caricis, *Herr.-Schæff. Eur. Schmett.* ii. 231, 148; ii. *Noct.* pl. 64, f. 324, 325.

a. b. Europe. From M. Becker's collection.

3. Leucania montium.

L. Scirpi *affinis at gracilior et angustior; alæ anticæ pallide cinereo-rufescentes, atomis minimis obscuris adspersæ, puncto medio albido strigaque arcuata obsoleta fusca vix interrupta; posticæ albidæ, venis margineque obscurioribus.*

Leucania montium, *Boisd. Ind. Méth.* 133, 1067. *Frey. Neu. Beit. Schmett.* v. pl. 395. *Herr.-Schæff. Eur. Schmett.* ii. 231, 149; ii. *Noct.* pl. 63, f. 317. *Guen. Noct.* i. 76, 101.

Swiss Alps.

Subgroup 2.

Alæ anticæ vix acuminatæ, non vittatæ, puncto discali albo punctisque exterioribus nigris.

Fore wings hardly acuminated, not striped, with a white discal point, and with exterior black points.

4. Leucania Cyperi.

L. Scirpi *affinis ; alæ anticæ pallide luteo-rufescentes, vena media albida subdilatata, puncto medio albido adjecto minore nigro ; posticæ albidæ, margine anguste fuscescente.*

Leucania Cyperi, *Boisd. Ind. Méth.* 133, 1064. *Guén. Noct.* i. 77, 102.

Calabria.

5. Leucania Zeæ.

Pallide cervina ; alæ anticæ, puncto discali albo lineisque duabus transversis e punctis nigris, 1*a obliqua antice retracta,* 2*a marginali ; posticæ albidæ.*

Leucania Zeæ, *Dup. Hist. Nat. Lép. Fr.* vii. 363, pl. 122, f. 4. *Meig. Syst. Besch. Eur. Schmett.* iii. 167, 3, pl. 122, f. 4. *Boisd. Ind. Méth.* 132, 1050. *Guén. Ann. Soc. Ent. Fr.* vi. ; *Noct.* i. 77, 103. *Herr.-Schæff. Eur. Schmett.* ii. 232, 15 ; ii. *Noct.* pl. 62, f. 315.

South France.

Var. Leucania Caricis, *Kindermann, MSS.*

South Russia.

a, b. Europe. From M. Becker's collection.

6. Leucania albivena.

Alæ anticæ pallidæ cinereo subluteæ, in medio infuscatæ, venis subalbidis, puncto discali albo, intus nigro notato, serie transversa incurvata punctorum nigrorum parvorum ; posticæ albo-subcinereæ.

Leucania albivena, *De Graslin, Ann. Soc. Ent. Fr.* 2*me Sér.* x. 409, 1, pl. 8, No. 1, f. 1.

Species distincta ?

West Coast of France.

Group 2.

Alæ sæpissime tenuiores, angustiores.

Wings much like those of the first group in colour, but generally narrower and more slight.

Leucanidæ

Subgroup 1.

Alæ anticæ subacuminatæ, pallide testaceæ aut pallide cervinæ, puncto discali albo.

Fore wings slightly acuminated, pale testaceous or pale fawn-colour, with a discal white point.

7. Leucania Herrichii.

Pallide rubescens; abdomen pallide testaceum; alæ anticæ fasciis incompletis diffusis cinereis, puncto discali albo; posticæ albæ, cinereo marginatæ.

Leucania Herrichii, *Frivaldsky; Herr.-Schæff. Eur. Schmett.* ii. 238, 169; ii. *Noct.* pl. 66, f. 341. *Guén. Noct.* i. 79, 108.

District of the Bosphorus.

8. Leucania punctosa.

Cervina; caput et thorax fasciis fuscis; alæ anticæ striga discali margineque exteriore fuscis, gutta discali lineolis exterioribus punctisque marginalibus albis, gutta interiore lineaque e punctis transversa arcuata exteriore nigris; posticæ albidæ margine fuscescente.

Simyra punctosa, *Treit. Schmett.* v. 2, 287, 4; *Suppl.* 94.
Leucania punctosa, *Meig. Syst. Besch. Eur. Schmett.* iii. 167, 4, pl. 108, f. 11. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 80, 109. *Herr.-Schæff. Eur. Schmett.* ii. 235, 161; ii. *Noct.* pl. 61, f. 310.

South France.

a, b. Europe. From M. Becker's collection.

9. Leucania putrescens.

Testacea; abdomen pallidum; alæ anticæ nigro conspersæ et guttatæ, vittis rufescentibus, gutta discali albida; posticæ subtestaceæ, punctis marginalibus nigris.

Noctua putrescens, *Geyer, Samml. Eur. Schmett.* 730, 731.
Leucania putrescens, *Herr.-Schæff. Eur. Schmett.* ii. 235, 160; ii. *Noct.* pl. 64, f. 327, 328. *Guén. Noct.* i. 80, 110.

Leucania punctosa, *Boisd. Ind. Méth.* 132, 1058. *Guén. Ann. So Ent. Fr.* vi. 237.
Leucania Boisduvalii, *Dup. Hist. Nat. Lep. Fr.* iv. 79, pl. 105.
Leucania Caricis? *Treit. Schmett. Eur. Suppl.* 91.

South France.

10. Leucania obsoleta.

Pallide cervina; abdomen testaceo-albidum; alæ anticæ nig raro punctatæ, venis albis fusco marginatis, gutta discali alb linea perobliqua exteriore e guttis nigris; posticæ albæ, ma gine pallide fuscescente.

——— ———, *Engr. Pop. d'Eur.* 503, c.
Noctua obsoleta, *Hübn. Samml. Eur. Schmett. Noct.* pl. 48, f. 23
Leucania obsoleta, *Treit. Schmett. Eur.* v. 2, 301, 6; *Suppl.* 9 *Dup. Hist. Nat. Lep. Fr.* vii. 77, pl. 105, f. 5. *Meig. Sy Besch. Eur. Schmett.* iii. 169, 8, pl. 108, f. 13. *Steph. I. Brit. Haust.* iii. 74; *Cat. Brit. Lep.* 124. *Westw. & Hum Brit. Moths*, i. 217, pl. 47, f. 5. *Boisd. Ind. Méth.* 133, 106 *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 81, 112. *Herr Schæff. Eur. Schmett.* ii. 234, 159; ii. *Noct.* pl. 60, f. 303–306.

a. England. Presented by J. C. Dale, Esq.
b—g. England. Presented by Mr. Longley.
h—p. England. From Mr. Stephens' collection.

Subgroup 2.

Alæ anticæ linea alba furcata.

Fore wings with a forked white line.

11. Leucania Loreyi.

Pallide cervina; abdomen pallide testaceum; alæ anticæ line tenui discali punctisque marginalibus nigris, striga exterior discali nigricante guttaque intermedia alba.

Leucania Loreyi, *Dup. Hist. Nat. Lép. Fr.* iv. 81, pl. 105, f. 7 *Frey. Neu. Beit. Schmett.* iv. pl. 413. *Boisd. Ind. Méth.* 133 1060. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 84, 121 *Herr.-Schæff. Eur. Schmett.* ii. 233, 155; ii. *Noct.* pl. 61, f 309; pl. 62, f. 314.

South France. Spain. Brazil. Java.

12. Leucania littoralis.

Pallide cervina; abdomen testaceum; alæ anticæ linea discali alba furcata nigricante marginata, striga postica nigricante strigisque exterioribus fuscis; posticæ candidæ.

ucania littoralis, *Curt. Brit. Ent.* pl. 157. *Steph. Ill. Brit. Haust.* iii. 74; *Cat. Brit. Lep.* 124. *Guén. Noct.* i. 85, 123.
ucania comma, *var.?* *Boisd. Ind. Méth.* 132, 1052. *Guén. Ann. Soc. Ent. Fr.* 237.

England. From Mr. Carter's collection.
-*e*. England. From Mr. Stephens' collection.
g. Europe. From M. Becker's collection.

13. Leucania velutina.

Cinerea; alæ anticæ linea furcata alba, fascia exteriore obliqua canescente, strigis submarginalibus nigricantibus; posticæ canescentes margine lato cinereo.

eucania velutina, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1846, pl. 2, f. 5. *Herr.-Schæff. Eur. Schmett.* ii. 230, 144; ii. *Noct.* pl. 71, f. 362, 363. *Guén. Noct.* i. 85, 124.

outh Russia.

14. Leucania pudorina.

Pallidissime cervina; abdomen basi album; alæ anticæ punctis nigris aspersæ, venis albis; posticæ albæ.

Noctua pudorina, *Wien. Verz.* 85, 11. *Hübn. Samml. Eur. Schmett. Noct.* pl. 86, f. 401—405. *Treit. Schmett. Eur.* ii. 299: *Suppl.* x. 94.
Leucania pudorina, *Dup. Hist. Nat. Lép. Fr.* vii. 75, pl. 105, f. 4. *Meig. Syst. Besch. Eur. Schmett.* iii, 168, 7, pl. 108, f. 12. *Steph. Ill. Brit. Haust.* iii. 80; *Cat. Brit. Lep.* 123; *Westw. and Humph. Brit. Moths*, i. 218, pl. 47, f. 13, 14. *Boisd. Ind. Méth.* 1049. *Guén. Ann. Soc. Ent, Fr.* vi. 237; *Noct.* i. 86, 125. *Herr.-Schæff. Eur. Schmett.* ii. 233, 154; ii. *Noct.* 65, f. 329, 331.

f. England. Presented by E. Doubleday, Esq.
o. England. From Mr. Stephens' collection.
u. Europe. From M. Becker's collection.

15. Leucania impudens.

Testacea; abdomen albidum; alæ anticæ luteo conspersæ, albo cinereoque lineatæ; posticæ cinereæ, ciliis albidis.

Noctua impudens, *Hübn. Samml. Eur. Schmett.* ii. *Noct.* 11, f. 229 (329, erratim).
Leucania impudens, *Guén. Noct.* i. 86, 126.
Leucania pudorina, *var.*, *Herr.-Schæff. Eur. Schmett.* ii. 233.
Europe.

Subgroup 3.

Alæ anticæ fusco nebulosæ, striga basali nigra, linea discali alba.

Fore wings shaded with brown, adorned with a basal black streak, and with a white discal line.

16. Leucania Comma.

Pallidissime cervina; alæ anticæ costa venaque discali albidis, striga basali lineolisque submarginalibus nigris; posticæ cinereæ, basi albidæ.

——— ———, *Engr. Pap. d'Eur.* 504, a—f.
Phalæna-Noctua Comma, *Linn. Syst. Nat.* 2, 850, 156; *Faun. Suec.* 1191. *Gmel. ed. Syst. Nat.* i. 5, 2567, 156.
Noctua Comma, *Fabr. Mant. Ins.* ii. 183, 103; *Ent. Syst.* iii. 2, 106, 318. *Wien. Verz.* 76, 9. *Bork. Eur. Schmett.* iv. 708, 343. *Kleem, Beit. Ins. Ges.* i. pl. 24, f. 1—6. *Haw. Lep. Brit.* 38.
Leucania Comma, *Treit. Schmett. Eur.* v. 2, 302, 7. *Dup. Hist. Nat. Lep. Fr.* vii. 83, pl. 106, f. 1. *Meig. Syst. Besch. Eur. Schmett.* iii. 169, 9, pl. 108, f. 7. *Steph. Ill. Brit. Haust.* iii. 71; *Cat. Brit. Lep.* 123. *Westw. & Humph. Brit. Moths*, i. 216, pl. 47, f. 2. *Boisd. Ind. Méth.* 132, 1051. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 86, 128. *Herr.-Schæff. Eur. Schmett.* ii. 233, 156.

a, *b*. England. Presented by E. Doubleday, Esq.
c—*k*. England. From Mr. Stephens' collection.
l—*o*. England.
p. Europe. From M. Becker's collection.

17. Leucania lineata.

Fusco-testacea; alæ anticæ costa media versus marginem interiorem late nigro terminata, areolis 2—4 basi nigris; posticæ fusco-cinereæ.

Leucania lineata, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842; *Faun. Volg-Ural.* 266. *Herr.-Schæff. Eur. Schmett.* ii. 234, 157, pl. 72, f. 368, 369. *Guén. Noct.* i. 87, 129.

Sarepta.

18. Leucania Anderreggii.

"*Fusco-testacea, aut testaceo-fusca; alæ anticæ costa media versus marginem interiorem nigro terminata, areola 4a fere omnino, 5a et 6a limbum versus nigris; posticæ fusco-cinereæ.*"—Herr.-Schæff.

Leucania Anderreggii, *Boisd. Ind. Méth.* 87, 1050. *Frey. Neu. Beit. Schmett.* v. pl. 395. *Guén. Noct.* i. 87, 130.
Leucania Anderreggii? *Herr.-Schæff. Eur. Schmett.* ii. 234, 158; ii. *Noct.* pl. 60, 64, f. 302, 326.

Swiss Alps.

19. Leucania Alopecuri.

Alæ anticæ pallide stramineæ linea media obsoleta, radiis apicalibus fimbriaque fuscis, puncto medio albo ad apicem areolæ punctulo nigro adjecto; posticæ albidæ. Fœm.—*Linea media fusca nulla, punctis plurimis exterioribus biseriatis.*

Leucania Alopecuri, *Boisd. Ind. Méth.* i. 32, 1057. *Eversm. Faun. Volg-Ural.* 267. *Frey. Neu. Beit. Schmett.* iv. pl. 359. *Herr.-Schæff. Eur. Schmett.* ii. 231, 150; ii. *Noct.* pl. 72. f. 369. *Guén. Noct.* i. 87, 131.

Sarepta.

20. Leucania albiradiosa.

Alæ anticæ pallide straminæ, vena mediana a basi ad fimbrias usque alba, supra infraque nigro limitata; posticæ albæ.

Leucania albiradiosa, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1852, 1, 158, 7.

Lower Wolga.

Subgroup 4.

Alæ anticæ linea angulata alba.

Fore wings with an angular white line.

21. Leucania L-album.

Testaceo-albida; thorax nigro conspersus; alæ anticæ strigis duabus basalibus strigulisque exterioribus nigro-fuscis, striga discali alba apice hamata, venis versus marginem exteriorem albidis; posticæ albidæ, extus subfuscescentes.

——— ———, *Engr. Pap. d'Eur.* 503, a, d.

Phalæna-Noctua L-album, *Gmel. ed. Syst. Nat.* i. 5, 2540, 154.

Noctua L-album, *Wien. Verz.* 85, 9. *Fabr. Sp. Ins.* ii. 226, 87; *Mant. Ins.* ii. 158, 159; *Ent. Syst.* iii. 272, 205. *Esp. Schmett.* pl. 90, f. 3, 4. *Bork. Eur. Schmett.* iv. 706, 312. *Hübn. Samml. Eur. Schmett. Noct.* pl. 47, f. 227; *Beitr.* pl. 2, K.

Leucania L-album, *Treit. Schmett. Eur.* v. 2, 306, 8. *Dup. Hist. Nat. Lép. Fr.* vii. 70, pl. 105, f. 2. *Meig. Syst. Besch. Eur. Schmett.* iii. 170, 10, pl. 108, f. 9; *Handb.* 169, 56. *Boisd. Ind. Méth.* 132, 1056. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 89, 134. *Herr.-Schæff. Eur. Schmett.* ii. 230, 146.

a—c. Europe. From M. Becker's collection.

Subgroup 5.

Alæ anticæ testaceæ, vix signatæ.

Fore wings testaceous, hardly marked.

22. Leucania riparia.

Statura L. L-album *eique affinis; alæ anticæ supra albo-roseæ, fusco luteoque variæ, fascia ad apicem obliqua dilutiore; punctorum nigrorum serie transversa interrupta; vena media ramis quibusdam albo-luteolis; alæ subtus nigricantes.*

Leucania riparia, *Ramb. Ann. Sci d'Obs.* 1829, 261, pl. 6, f. 3; *Ann. Soc. Ent. Fr.* i. 288, pl. 9, f. 1. *Boisd. Ind. Méth., err. et add.* 132, 1055. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 339, pl. 31. *Herr.-Schæff. Eur. Schmett.* ii. 236, 165; ii. *Noct.* pl. 61, 62, f. 308, 316. *Guén. Noct.* i. 91, 140.

South France. Corsica.

23. Leucania congrua.

Similis L. obsoletæ; *alæ anticæ supra luteo-rufæ, vena media in punctum dilatata; serie transversa punctorum nigrorum obliqua interrupta, vix incurvata, aliquando fere nulla; alæ posticæ fusco-luteolæ; omnes subtus margaritaceæ.*

Leucania amnicola, *Ramb. Ann. Sci. d'Obs.* 1829, 162, pl. 6, f. 5; *Ann. Soc. Ent. Fr.* i. 289, pl. 9, f. 2; *Collect. Icon. Chen. d'Eur.* (Larva). *Boisd. Ind. Méth.* 133, 1062. *Guén. Ann. Soc. Ent. Fr.* vi. 237. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 336, pl. 31. *Herr.-Schæff. Eur. Schmett.* ii. 236, 166; ii. *Noct.* pl. 65, f. 334.

Noctua congrua? *Hübn. Samml. Eur. Schmett.* f. 616.

Leucania congrua, *Treit. Suppl.* x. 92. *Boisd. Ind. Méth.* 132, 1054. *Herr.-Schæff. Eur. Schmett.* ii. 237, 167; *Noct.* pl. 70, f. 357, 360. *Guén. Noct.* i. 91, 141.

South France, Corsica, Sicily, Hungary.

24. Leucania sicula.

Ochraceo-testacea; alæ anticæ ciliis obscurioribus, puncto discali albo basim versus acute terminato, venis æqualiter pallidioribus fusco cinctis, 5a utrinque nigro cincta, punctis lineæ limbalis obsoletis.

Leucania sicula, *Treit. Schmett. Eur. Suppl.* x. 90. *Boisd. Ind. Méth.* 133, 1063. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 91, 142. *Herr.-Schæff. Eur. Schmett.* ii. 232, 152; ii. *Noct.* pl. 66, f. 340.

Sicily.

25. Leucania straminea.

Pallidissime cervina; abdomen albidum; alæ anticæ punctis nigris raro conspersæ, guttis tribus in lineam transversam exterioribus nigris; posticæ albidæ, linea obliqua discali e guttis nigricantibus.

Leucania straminea, *Treit. Schmett. Eur.* v. 2, 297; *Suppl.* x. 89. *Boisd. Ind. Méth.* 133, 1069. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 346, pl. 32, f. 2. *Frey. Neu. Beit. Schmett.* ii. pl. 123. *Herr.-Schæff. Eur. Schmett.* ii. 236, 164; iii. *Noct.* pl. 63, 64, f. 321—323. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 91, 143. *Steph. Cat. Brit. Lep.* 124.

Nonagria Vectis, *Curt. Brit. Ent.* x. pl. 459.
Nonagria? Vectis, *Steph. Ill. Brit. Ent. Haust.* iv. 390.

a, *b*. England. Presented by S. Stevens, Esq.
c. England. From Mr. Carter's collection.
d—*l*. England. From Mr. Stephens' collection.
m. England.
n—*q*. Europe. From M. Becker's collection.
Var.? *Pallidior*.
r—*u*. New York. Presented by E. Doubleday, Esq.

26. Leucania impura.

Pallidissime cervina; alæ anticæ vitta discali obscuriore, nigro obsolete punctatæ, guttis 1—3 *discalibus nigris; posticæ pallide fuscescentes, apud costam albidæ margaritaceæ, ciliis albis.*

——— ———, *Albin, Nat. Hist. Engl. Ins.* pl. 33, f. 3. *Engr. Pap. d'Eur.* 505, a—c.
Noctua impura, *Hübn. Samml. Eur. Schmett. Noct.* pl. 85, f. 396.
Leucania impura, *Treit. Schmett. Eur.* v. 2, 294, 3; *Suppl.* 89. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 105, f. 3. *Meig. Syst. Besch. Eur. Schmett.* iii. 168, 6, pl. 108, f. 8. *Steph. Ill. Brit. Ent. Haust.* iii. 75; *Cat. Brit. Lep.* 123. *Westw. & Humph. Brit. Moths*, i. 216, pl. 47, f. 3, 4. *Boisd. Ind. Méth.* 133, 1070. *Herr.-Schæff. Eur. Schmett. Noct.* i. 92, 144; ii. 235, 163; ii. *Noct.* pl. 63, f. 319, 320. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 92, 144.
Noctua fuliginosa, *Haw. Lep. Brit.* 39.
Noctua punctina, *Haw. Lep. Brit.* 40.
Leucania punctina, *Steph. Ill. Brit. Ent. Haust.* iii. 75. *Wood, I. E.* pl. 15, f. 563.

a—*c*. England. Presented by W. Wing, Esq.
d—*n*. England. From Mr. Stephens' collection.
o. Englaud.
p—*v*. Europe. From M. Becker's collection.

27. Leucania pallens.

Pallidissime cervina; abdomen pallide testaceum aut albidum; alæ anticæ punctis tribus aut duobus discalibus nigris, venis albidis; posticæ maris *albæ*, fœminæ *fuscescentes.*

——— ———, *Engr. Pap. d'Eur.* 505, d, e. *Deg. Ins.* ii. pl. 7, f. 14.

Phalæna-Noctua pallens, *Linn. Faun. Suec.* 1175. *Gmel. ed. Syst. Nat.* i. 5, 2532, 107. *Clerck, Icon.* pl. 4, f. 6.

Noctua pallens, *Wien. Verz.* 85, 10. *Fabr. Sp. Ins.* ii. 214, 26; *Mant. Ins.* ii. 139, 36; *Ent. Syst.* iii. 2, 22, 47. *Esp. Schmett.* pl. 90, f. 1. *Bork. Eur. Schmett.* iv. 712, 314. *Hübn. Samml. Eur. Schmett. Noct.* pl. 48, f. 234; *Beitr.* pl. 2, 4. *Haw. Lep. Brit.* 42.

Leucania pallens, *Treit. Schmett. Eur.* v. 2, 290, 1. *Dup. Hist. Nat. Lép. Fr.* vii. 4, 68, pl. 105, f. 1. *Meig. Syst. Besch. Eur. Schmett.* iii. 167, 5, pl. 108, f. 6; *Handb.* 169, 54. *Guén. Noct.* i. 92, 145. *Boisd. Ind. Méth.* 133, 1073. *Herr.-Schæff. Eur. Schmett.* ii. 235, 162. *Steph. Ill. Brit. Ent. Haust.* iii. 76; *Cat. Brit. Lep.* 124. *Westw. & Humph. Brit. Moths*, i. 217, pl. 47, f. 7, 8.

t—r. England. From Mr. Stephens' collection.
t—w. England.
z. Scotland. From Mr. Foxcroft's collection.
y—z. Europe. From M. Becker's collection.

28. Leucania Ectypa.

Alæ anticæ lutescentes, venis albis; posticæ albidæ, fascia margineque subcinereis.

Noctua Ectypa, *Hübn. Samml. Eur. Schmett. Lep.* iv. *Noct.* ii. f. 231.

Leucania pallens, *var.*, *Herr.-Schæff. Eur. Schmett.* ii. 235, 162.

Leucania ectypa, *Guén. Noct.* i. 94, 146.

Europe.

29. Leucania furcata.

Cinnamomeo-testacea; alæ anticæ venis albis; posticæ albæ.

Leucania furcata, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837; *Faun. Volg-Ural.* 264. *Herr.-Schæff. Schmett. Eur.* ii. 230, 145; ii. *Noct.* pl. 71, f. 364. *Guén. Noct.* i. 94, 147.

Ural District.

30. Leucania verecunda.

Alæ anticæ levissime e virescente pallide lutescentes, concolores; posticæ sordide lutescentes, concolores.

Leucania verecunda, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xxi. 3, 219, 10. *Guén. Noct.* i. 94, 148.

South West Ural Mountains.

Group 3.

Corpus gracilius. Alæ anticæ latiores, unicolores, margine exteriore subundulato, subobliquo.

Calamia, *Hübn.; Steph. Cat. Brit. Lep.*

Body more slender than in the other groups. Fore wings of one colour, unvaried, rather broader than usual, indistinctly undulating, and very slightly oblique along the exterior border.

31. Leucania Phragmitidis.

Pallidissime cervina; thorax antice albus; alæ anticæ apud costam pallidiores, venis albidis; posticæ pallide cinerascentes.

Noctua Phragmitidis, *Hübn. Samml. Eur. Schmett. Noct.* pl. 47, f. 230.

Nonagria Phragmitidis, *Treit. Schmett. Eur.* v. 2, 317, 5.

Leucania Phragmitidis, *Dup. Hist. Nat. Lép. Fr.* vii. 90, pl. 106, f. 5. *Meig. Syst. Besch. Eur. Schmett.* iii. 170, 12, pl. 108, f. 15. *Boisd. Ind. Méth.* 134, 1074. *Herr.-Schæff. Eur. Schmett.* ii. 229, 143. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 94, 149.

Leucania musculosa, *Steph. Ill. Brit. Haust.* iii. 81. *Westw. and Humph. Brit. Moths*, i. 47, pl. 16; pl. 48, f. 1.

Noctua semicana, *Esp. Schmett.* pl. 189, f. 5.

Calamia Phragmitidis, *Hübn. Verz. Schmett.* 240. *Steph. Cat. Brit. Lep.* 124.

a, *b*. England. Presented by — Whitwell, Esq.
c, *d*. England. Presented by E. Doubleday, Esq.
e—*m*. England. From Mr. Stephens' collection.

North America.

Group 1.

Like the first European group.

Subgroup 1.

Statura sat magna. Alæ anticæ acutæ.

Size rather large. Fore wings acute.

32. Leucania extranea.

Pallide cervina; alæ anticæ punctis subobsoletis saturatioribus aut nigris, linea e punctis nigris obliqua antice retracta, striga subapicali obliqua fusca; posticæ fuscescentes, ciliis albis.

Leucania extranea, *Guén. Noct.* i. 77, 104.

a, b. United States. Presented by Major-General Hardwicke.
c, d. Georgia. From Mr. Milne's collection.
e, f. Florida. Presented by E. Doubleday, Esq.
g. South America. Presented by C. Darwin, Esq.
h. Orilla, West Canada. From Mr. Bush's collection.

Var. β. *Minor; alæ posticæ albæ, margine sæpissime fuscescente.*

i—n. Venezuela. From Mr. Dyson's collection.
o. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.

Var. γ. *Pallidior; alæ anticæ puncto nullo discali albo.*

p—s. North India. From Mr. Stevens' collection.
t. Nepaul. Presented by Major-General Hardwicke.

Var. δ. Var. γ. *similis; alæ anticæ nonnunquam obscuriores; posticæ margine obscuriore.*

v, u. Sydney. From Mr. Lambert's collection.
w. New Holland. Presented by J. Hunter, Esq.

Var. ε. Var. α. *simillima, magnitudine varia; alæ anticæ colore variæ, puncto nullo discali albo.*

x, y. New Zealand. Presented by Dr. Sinclair.
z. New Zealand. Presented by the Rev. W. Colenso.
aa—gg. New Zealand. Presented by Col. Bolton.

Perhaps two or three species may be here included under the name of *L. extranea.*

Subgroup 2.

Statura parva. Corpus gracilius. Alæ anticæ cervinæ, nig conspersæ.

Size small. Body more slender. Fore wings fawn-colo speckled with black.

33. Leucania videns.

Cervina; abdomen cinerascens; alæ anticæ apud venas nigr punctatæ, striga nigra guttaque alba discalibus, guttis ciliari bus albis; posticæ albæ.

Leucania videns, *Guén. Noct.* i. 78, 106.

a. Florida. Presented by E. Doubleday, Esq.

34. Leucania extincta.

Pallidissime cervina; abdomen albidum; alæ anticæ nigro punc tatæ, vitta tenui discali nigra albo interlineata nonnunquam subobsoleta, lineis duabus transversis exterioribus e guttis ni gris; posticæ albæ aut albidæ, marginibus obscurioribu nigro guttatis.

Leucania extincta, *Guén. Noct.* i. 79, 107.

a—d. St. John's Bluff, East Florida. Presented by E. Doubleday Esq.

35. Leucania diffusa.

Testacea; thorax fasciis anticis fuscescentibus; alæ anticæ costa fuscescente, vitta discali pallide fusca lineam albidam lineam que interruptam nigricantem includente, gutta antica nigra strigaque albida subapicali obliqua; posticæ albæ, marginibu testaceis.

Testaceous. Thorax with some brownish bands in front Fore wings slightly brownish along the costa, and with a pal brown discal stripe, which has a black dot in front, and includes whitish line and a blackish line; the latter is interrupted; a whitisl subapical oblique streak. Hind wings white with testaceous bor ders. Length of the body 5 lines; of the wings 11 lines.

a. Nova Scotia. From Lieut. Redman's collection.

Group 2.

Like the second European group.

Subgroup 1.

Like the first European subgroup.

36. Leucania insueta.

Pallide cervina; abdomen pallidissime cervinum; alæ anticæ vitta diffusa margineque exteriore fuscescentibus, linea discali furcata alba lineisque duabus transversis exterioribus e punctis nigris; posticæ cinereæ, aut albidæ cinereo marginatæ.

Leucania insueta, *Guén. Noct.* i. 81, 113.

c—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.
e. Nova Scotia. From Lieut. Redman's collection.

Var. *Testacea; alæ anticæ nigro conspersæ, vitta diffusa discali fuscescente strigam albidam brevissimam includente, guttis exterioribus fuscis punctisque marginalibus nigris; posticæ albidæ, testaceo marginatæ.*

Testaceous. Fore wings speckled with black, and having a diffused brownish discal stripe, which contains a very short whitish streak; the usual exterior brown dots and black marginal points. Hind wings whitish with testaceous borders. Length of the body 4¼ lines; of the wings 11 lines.

f. Florida. Presented by E. Doubleday, Esq.

37. Leucania linita.

Pallidissime cervina; abdomen albidum; alæ anticæ subfalcatæ, nigro parce conspersæ, striga brevi nigra guttuque albida discalibus, lineis duabus transversis exterioribus e punctis nigris, margine exteriore recto; posticæ albæ.

Leucania linita, *Guén. Noct.* i. 81, 114.

e—g. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

38. Leucania juncicola.

Var.? *Pallide testacea; thorax lineis quatuor transversis nigr cantibus; alæ anticæ guttis duabus discalibus, guttis exteri ribus punctisque marginalibus nigris; posticæ pallide cinerea tibiæ calcaribus basi nigro guttatis.*

Leucania juncicola, *Boisd. MSS. Guén. Noct.* i. 83, 119.

North America.

Var.? Pale testaceous. Thorax with four blackish transver lines. Fore wings with a black dot near the base of the fourth in ferior vein, another at the base of the first inferior vein, and a fe more forming a transverse exterior line; exterior margin with blac points. Hind wings pale cinereous. Spurs of the tibiæ with blac dots at the base. Length of the body 6 lines; of the wings 1 lines.

a. United States. Presented by E. Doubleday, Esq.

39. Leucania scirpicola.

Pallide roseo-cervina; abdomen albidum; alæ anticæ nigro punc tatæ, linea cinerea, lineola alba guttaque posteriore nigra dis calibus, linea transversa obliqua exteriore e guttis nigris posticæ albidæ, marginibus pallide cervinis fusco punctatis.

Leucania scirpicola, *Guén. Noct.* i. 84, 120.

a—e. St. John's Bluff, E. Florida. Presented by E. Doubleday Esq.

Subgroup 2.

Like the third European subgroup.

40. Leucania commoides.

Pallidissime cervina; abdomen albidum; alæ anticæ nigro vittat et albo lineatæ, lineis duabus transversis guttularibus strigisqu fuscis; posticæ cinerascentes, basi pallidiores, ciliis albidis.

Leucania commoides, *Guén. Noct.* i. 86, 127.

a, b. New York. Presented by E. Doubleday, Esq.

Subgroup 3.

Like the fourth European subgroup.

41. LEUCANIA MULTILINEA.

Pallide testacea; thorax nigro subconspersus, fascia cinerascente; alæ anticæ vittis duabus obscure fuscis, venis albis, areolis fusco strigatis, guttis quinque punctisque marginalibus nigris; posticæ albidæ, apud marginem exteriorem cinereæ nigro guttatæ.

Pale testaceous. Thorax with a grayish indistinct band, lightly speckled with black. Fore wings with two dark brown stripes, with the veins mostly white, with two pale brown streaks on each areolet, with five black dots, and with black points along the exterior border; interior border speckled with black. Hind wings whitish, cinereous towards the exterior border, which has a row of black dots. Length of the body 5 lines; of the wings 12 lines.

Orilla, West Canada. From Mr. Bush's collection.

Subgroup 4.

Like the fifth European subgroup.

42. LEUCANIA PHRAGMITIDICOLA.

VAR.? *Albida; alæ anticæ pallide roseæ, vitta testacea, vena mediana alba, lineis duabus exterioribus transversis guttularibus nigris, margine interiore nigro conspersa; posticæ albæ, margine exteriore pallide roseo-cinereo guttis nigris.*

Leucania Phragmitidicola, *Guén. Noct.* i. 89, 136.

North America.

Var.? Whitish. Fore wings pale rose-colour, with a slight testaceous stripe, which extends from the base to the tip; median vein white; a black dot at the tip of the discal areolet, and two exterior transverse lines of black dots; interior border speckled with black. Hind wings white; exterior border pale rosy cinereous with black dots. Length of the body 4½ lines; of the wings 12 lines.

St. Domingo. From Mr. Tweedie's collection.

West Indies

Group 1.

43. Leucania dorsalis.

Pallide testacea, subtus albida; thorax fasciis purpureo-ferrugineis; alæ anticæ venis albidis, areolis albido lineatis, guttis tribus discalibus punctisque marginalibus nigris; posticæ albæ, margine exteriore subcinereo guttis nigris.

Pale testaceous, whitish beneath. Thorax with several purplish ferruginous bands. Fore wings with whitish veins, and with two whitish lines on each areolet; three black dots on the disk, the usual one at the tip of the discal areolet, and two exterior; some black points along the exterior border. Hind wings white, with black dots along the exterior border, which is slightly cinereous. Length of the body 5½ lines; of the wings 11 lines.

a. St. Domingo. From Mr. Tweedie's collection.

South America.

Group 1.

Like the second European group.

Subgroup 1.

Like the first European subgroup.

44. Leucania rivorum.

Thorax cinereo nebulosus; alæ anticæ flavescente-cinereæ, violaceo cinereo variæ, puncto discali punctisque exterioribus nigris; posticæ albæ opalinæ.

Leucania rivorum, *Guén. Noct.* i. 82, 115.

Brazil.

45. Leucania impuncta.

Magna; thorax robustus; pedes valde villosi; alæ anticæ pallidissime ochraceæ, venarum marginibus vix obscurioribus; posticæ albæ, iridescentes, venis margineque nigricantibus.

Leucania impuncta, *Guén. Noct.* i. 83, 117.

Chili.

46. Leucania solita.

Pallidissime testacea; abdomen albidum; alæ anticæ vitta mediana alba subfusco marginata, gutta apud areolæ discalis apicem guttisque exterioribus nigris; posticæ albæ.

Very pale testaceous. Abdomen whitish. Fore wings with the median vein white, and with a brownish tinge along its border; the black dot at the tip of the discal areolet and the exterior black dots as usual. Hind wings white. Length of the body 6 lines; of the wings 12 lines.

a. ——? Presented by J. G. Children, Esq.
b. Honduras. From Mr. Miller's collection.

Subgroup 2.

Like the fourth European subgroup.

47. Leucania albilinea.

Mas. *Fusca; abdomen cinerascens; alæ anticæ vitta discali albida, ad costam subcinereæ; posticæ basi marginibusque testaceis.*

Leucania albilinea (Noctua genuina, Heliophila pallida), *Hübn. Samml. Exot.* *Schmett.* ii. 25, 169, f. 337, 338.

Buenos Ayres.

Leucania albilinea? *Guén. Noct.* i. 89, 135.

North America.

Subgroup 3.

Like the fifth European subgroup.

48. Leucania humidicola.

Stramineo-alba; abdomen maris *pilosum, longissimum; pedes valde villosi; alæ anticæ sat angustæ, vena mediana alba fusco-olivaceo nebulosa, puncto discali nigro, plaga subapicali trigona fuscescente, punctis marginalibus nigris; posticæ albæ, opalinæ.*

Leucania humidicola, *Guén, Noct.* i. 90, 137.

Cayenne.

49. Leucania extenuata.

Prothorax violaceo-cinereo marginatus; abdomen maris *longum apice fasciculatum; alæ anticæ angustæ, flavescente-albo incarnatæ, albo et fuscescente radiatæ, vena mediana fuscescente nebulosa, macula apicali fuscescente; posticæ albæ, opalinæ, venarum apicibus margineque subcinereis.*

Leucania extenuata, *Guén. Noct.* i. 90, 138.

Brazil.

50. Leucania Tayaudi.

Prothorax violaceo-cinereo marginatus; alæ anticæ angustæ, flavescente-albo incarnatæ, albo et fuscescente radiatæ, vena mediana alba, fuscescente nebulosa, puncto discali nigro, macula apicali fuscescente; posticæ albæ, opalinæ, venarum apicibus margineque subcinereis; abdomen maris *non fasciculatum.*

Leucania Tayaudi, *Feisthamel, MSS. Guén. Noct.* i. 90, 139.

Monte Video.

51. Leucania lineolata.

Alba; thorax pallide testaceus; alæ anticæ angulatæ, venis pallide testaceis, areolis testaceo lineatis, gutta discali fusca, margine exteriore recto.

White. Thorax pale testaceous. Fore wings rectangular at the tips, with pale testaceous veins, and with a single testaceous line on each areolet; a brown dot at the tip of the discal areolet; exterior border straight. Length of the body 4½ lines; of the wings 12 lines.

a. Venezuela. From Mr. Dyson's collection.

52. Leucania antica.

Pallide cervina; thorax fusco fasciatus; abdomen pallidissime cervinum; alæ anticæ costa margineque interiore nigro conspersis, guttis discalibus fuscis, fasciis exterioribus guttularibus nigris, margine exteriore antice fuscescente; posticæ albidæ guttis marginalibus nigris.

Pale fawn-colour. Thorax with several brown bands. Abdomen very pale fawn-colour. Fore wings with the costa and interior border, speckled with black, with some brown dots in the disk, with

the usual exterior band of black dots, which are more numerous than in most species, and with a brownish tinge on the fore part of the exterior border. Hind wings whitish, with the usual black marginal dots. Length of the body 6 lines; of the wings 12 ines.

a. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.

Group 1.

Like the second European group.

Subgroup 1.

Like the third European subgroup.

53. LEUCANIA TORRENTIUM.

Subrubescens; abdomen apud medium nigricans; palpi articulo 3o longiusculo, porrecto; alæ anticæ vitta discali interrupta obscura; macula discali alba nigro punctata, striga anteriore rufa; posticæ albidæ, subiridescentes, margine exteriore fuscescente.

Leucania torrentium, *Guén. Noct.* i. 88, 132.

Cape. Madagascar. Isle of France.

Subgroup 2.

Like the fourth European subgroup.

54. LEUCANIA AMENS.

Var.? *Pallidissime testacea; alæ anticæ nigro subconspersæ, venis posterioribus albis, cinereo submarginatis, vittis duabus (una antica, altera apud marginem interiorem) fulvescentibus, gutta discali nigra, guttis exterioribus subobsoletis, punctis marginalibus distinctis; posticæ albidæ, venis marginibusque cinereis.*

Leucania amens, *Guén. Noct.* i. 88, 133.

Cape.

Var.? Very pale testaceous. Fore wings slightly speckled with black, with the median vein and the inferior veins white, and

slightly bordered with gray; a slight tawny stripe in front, and another along the interior border; a black dot at the tip of the discal areolet; the exterior dots almost obsolete; the marginal points distinct. Hind wings whitish, with cinereous borders and veins. Length of the body 4—4½ lines; of the wings 9—10 lines.

a. South Africa. Presented by Dr. Smith.
b. Port Natal. From M. Gueinzius' collection.

55. Leucania curvula.

Pallide testacea; thorax fasciis fuscescentibus; abdomen albidum; alæ anticæ nigro subconspersæ, vitta cinerascente, gutta discali alba, guttis exterioribus punctisque marginalibus nigris; posticæ albæ, subopalinæ.

Pale testaceous. Thorax with some brownish bands. Abdomen whitish. Fore wings very slightly speckled with black, paler in front of the slight grayish stripe, which is curved upward towards the tip of the wing; it has a black dot behind its interior side, and encloses the white dot at the tip of the discal areolet; an exterior transverse line of black dots, and the usual marginal black points. Hind wings white. Length of the body 5—6 lines; of the wings 12—14 lines.

a—d. Congo. Presented by Sir J. Richardson.

56. Leucania prominens.

Fœm. *Pallidissime testacea; thorax cinereo unifasciatus; abdomen album; alæ anticæ nigro subconspersæ, vena mediana alba, gutta discali punctisque exterioribus nigris; posticæ albæ, marginibus nigro guttatis.*

Female. Very pale testaceous. Thorax with a single cinereous band. Abdomen white. Fore wings minutely speckled with black, slightly darker about the median vein, which is white; a black dot at the tip of the discal areolet, and black points along the exterior border. Hind wings white, with black dotted borders. Length of the body 5 lines; of the wings 12 lines.

a, b. Congo. Presented by Sir J. Richardson.

57. Leucania plana.

Pallide testacea; alæ punctis marginalibus nigris; anticæ venis albis fusco marginatis, striga interrupta posteriore strigisque exterioribus fuscis; posticæ albæ, apud margines pallide fuscescentes.

Pale testaceous. Wings with black marginal points. Fore wings with the median vein and the inferior veins white, mostly bordered with brown: an interrupted brown posterior stripe, which is darkest towards the base, and some exterior brown streaks. Hind wings white, pale brownish towards the borders. Length of the body 5 lines; of the wings 12 lines.

a, *b*. South Africa. Presented by Dr. A. Smith.

58. LEUCANIA INCERTA.

Fœm. *Pallide testacea; alæ anticæ nigro subconspersæ; posticæ albæ.*

Female. Pale testaceous. Fore wings slightly speckled with black, but without any other distinct marks. Hind wings white. Length of the body 5½ lines; of the wings 12 lines.

a. South Africa. Presented by Dr. A. Smith.

Subgroup ?

59. LEUCANIA FUSCILINEA.

Alæ anticæ cinereo rufulæ, venis dilutioribus vix distinctis, puncto discali albo intus nigro notato, lineis duabus fuscis longitrorsum positis, priori ad basim, 2a prope supraque in medio collocata, serie transversa incurvata punctorum nigrorum parvorum; posticæ cinereæ.

Leucania fuscilinea, *DeGraslin, Ann. Soc. Ent. Fr. 2me Sér.* x. 411, 2, pl. 8, No. 1, f. 2.

West Coast of Africa.

Isle of France.

Group 1.

Like the second European group.

Subgroup 1.

Like the first European subgroup.

60. LEUCANIA INSULICOLA.

Villosa, robusta; antennæ longæ, ciliato-crenulatæ; alæ anticæ carneo-cinereæ, apud costam rectæ, apice angulatæ, venis guttaque discali cuneiformi albis, umbra nigricante, apice obscura striga obliqua pallida.

Leucania insulicola, *Guén. Noct.* i. 82, 116.
Isle of France.

Hindostan.

Group 1.

Like the first European group.

Subgroup 1.

61. LEUCANIA YU.

Alæ anticæ ochraceo-cinereæ, nigro ex parte conspersæ, areola discali apice rufescente nigroque bipunctata, costa margineque exteriore rectis; posticæ nigricante cinereæ, basi pallidiores subhyalinæ, ciliis flavescente-albis.

Leucania Yu, *Lefebvre, MSS. Guén. Noct.* i. 78, 105.
Manilla.

Group 2.

Like the second European group.

Subgroup 1.

Like the first European subgroup.

62. LEUCANIA EXSANGUIS.

Var? *Pallidissime testacea; abdomen albidum; alæ anticæ nigro subconspersæ, vittis posterioribus albis cervino submarginatis, striga obliqua apicali albida, areolis exterioribus nigro lineatis; posticæ albæ, apud margines subcinereæ.*

Leucania exsanguis, *Guén. Noct.* i. 83, 118.
Silhet. Java.

Var.? Very pale testaceous. Abdomen whitish. Fore wings slightly speckled with black; the median vein and its branches white, slightly bordered with fawn-colour; an oblique whitish apical streak; exterior areolets with some black lines. Hind wings white, very slightly cinereous towards the borders. Length of the body 6 lines; of the wings 14 lines.

a. North India. From Mr. Stevens' collection.

63. Leucania collecta.

Pallide testacea aut pallidissime cervina; thorax fasciis subcinereis; abdomen pallidissime testaceum; alæ anticæ nigro subconspersæ, gutta discali alba, vitta discali fuscescente, postica pallidiore, guttis exterioribus nigris, margine exteriore fusco punctis nigris; posticæ albæ, venis obscurioribus, guttis marginalibus fuscis.

Pale testaceous or very pale fawn-colour. Thorax with some grayish bands. Abdomen very pale testaceous. Fore wings slightly speckled with black, with the usual white discal dot, which is included in a brownish stripe; the latter is imperfectly joined to a brown space along the exterior border, and having a paler stripe behind it; the usual exterior black dots and marginal points. Hind wings white, with darker veins, and with brown marginal dots. Length of the body 6 lines; of the wings 14 lines.

a. Punjaub. Presented by General Hearsay.

64. Leucania confusa.

Pallidissime cervina; abdomen albido-testaceum; alæ anticæ sat latæ, guttis tribus discalibus nigricantibus, apice subrotundatæ, costa subrecta, margine exteriore recto vix obliquo; posticæ albæ.

Very pale fawn-colour. Abdomen whitish testaceous. Fore wings rather broad, with three blackish dots in the disk; costa nearly straight, tips slightly rounded; exterior border straight, very slightly oblique. Hind wings white. Length of the body 5 lines; of the wings 12 lines.

a, b. Ceylon. Presented by R. Templeton, Esq.

65. Leucania inferens.

Pallide cervina; abdomen albido-testaceum; alæ anticæ guttis tribus discalibus, vitta intermedia fuscescente, lineaque apud marginem exteriorem vix interrupta nigricante; posticæ albæ.

Pale bright fawn-colour. Abdomen whitish testaceous, much paler than the thorax. Fore wings with three black discal dots and with an intermediate brownish stripe, which accompanies the median vein and its branches; a hardly interrupted blackish line along the exterior border. Hind wings white. Length of the body 4½ lines; of the wings 10 lines.

a. Ceylon. Presented by R. Templeton, Esq.

66. Leucania exterior.

Pallide testacea; thorax fasciis fuscescentibus; abdomen albido-testaceum; alæ anticæ lineis anticis pallidis, gutta discali albida, vitta discali plagaque marginali fuscis, venis posterioribus albis, guttis exterioribus nigris; posticæ albæ, venis margineque fuscescentibus.

Pale testaceous. Thorax with brownish bands. Abdomen whitish testaceous. Fore wings with pale lines along the areolets in front of the usual whitish discal dot, which is included in a brown discal stripe, and the latter joins a dilated brown space along the exterior border; median vein and inferior veins white; the usual exterior black dots. Hind wings white; veins and space between them along the exterior border brownish. Length of the body 4 lines; of the wings 12 lines.

a. Punjaub. Presented by General Hearsay.

67. Leucania proscripta.

Pallide testacea; abdomen albidum; alæ anticæ apud marginem exteriorem cervinæ, guttis exterioribus indistinctis, vitta discali fuscescente, linea marginali fusca, ciliis albido-testaceis; posticæ albæ.

Pale testaceous. Abdomen whitish. Fore wings fawn-coloured towards the exterior border, with the exterior dots indistinct; a pale brownish discal stripe, and a brown line along the exterior border, which has whitish testaceous ciliæ. Hind wings white. Length of the body 5 lines; of the wings 10 lines.

a. East Indies. From Archdeacon Clerk's collection.

Subgroup 2.

Like the fourth European subgroup.

68. Leucania thoracica.

Mas. *Pallide cervina; caput et thorax anticus obscuriora; alæ anticæ vittis duabus discalibus subobscurioribus, striga exteriore obscuriore antice obliqua et angulata, gutta discali albida, guttis exterioribus subobsoletis, punctis marginalibus vix distinctis; posticæ albidæ, marginibus subtestaceis.*

Male. Pale fawn-colour. Head and fore part of the thorax darker. Fore wings with two slightly darker indistinct discal

stripes, and with a darker streak, which extends along the exterior border, and is oblique and angular in front; a whitish discal dot; exterior dots almost obsolete; marginal points indistinct. Hind wings white, slightly testaceous along the borders. Length of the body 6 lines; of the wings 14 lines.

Dukhun. In the East India Company's collection.

69. Leucania designata.

Testacea; abdomen subalbidum; alæ anticæ vitta discali fusca guttam albam includente apud marginem dilatata, guttis exterioribus indistinctis, punctis marginalibus distinctis; posticæ albæ, margine exteriore fuscescente.

Testaceous. Abdomen almost whitish. Fore wings with a brown discal stripe, which includes a white discal dot, and is dilated towards the exterior border, and extends along it; exterior dots indistinct; black marginal points distinct. Hind wings white; exterior border mostly pale brown. Length of the body 4½ lines; of the wings 11 lines.

Canara. In the East India Company's collection.

70. Leucania denotata.

Fœm. *Testacea; thorax fusco fasciatus; alæ anticæ strigis areolaribus indistinctis obscurioribus, vitta discali strigaque exteriore fuscescentibus, gutta discali albida, guttis exterioribus indistinctis, punctis marginalibus fuscis bene determinatis, costa fusco subconspersa; posticæ albæ.*

Female. Testaceous. Thorax with several brown bands. Fore wings with indistinct darker streaks on the areolets, and with a pale brownish discal stripe, which joins a streak of the same hue along the exterior border; a whitish discal dot; exterior dots indistinct; brown marginal points distinct; costa minutely speckled with brown. Hind wings white. Length of the body 6 lines; of the wings 13 lines.

North India. In the East India Company's collection.

Subgroup 2.

Corpus vix robustum. Alæ anticæ vittis argenteis.

Body hardly stout. Fore wings with silvery stripes, obtuse at the tips, hardly oblique along the exterior border.

71. Leucania bivittata.

Ochracea; abdomen fasciis subargenteis; alæ anticæ vittis duabus strigisque exterioribus argenteis; posticæ argenteæ.

Orange-colour. Abdomen with somewhat silvery bands. Fore wings with two bright silvery white stripes; the fore one obsolete towards the base of the wing; a row of silvery streaks along the exterior border; underside silvery white. Hind wings bright silvery white. Length of the body 4½ lines; of the wings 11 lines.

a. East Indies. From Archdeacon Clerk's collection.

Subgroup 3.

Alæ anticæ auratæ.

Fore wings gilded.

72. Leucania aureola.

Cervina; abdomen pallide luteum; alæ anticæ angustæ, auratæ, apice rotundatæ, apud costam cervinæ, vitta discali interrupta fusca, guttis exterioribus indistinctis, guttis marginalibus nigris optime determinatis; posticæ albæ.

Fawn-colour. Abdomen pale luteous. Fore wings gilded, narrow, rounded at the tips, rather oblique along the exterior border, fawn-colour along the costa, with a brown discal stripe, which is interrupted towards the border; exterior dots indistinct; black marginal dots very distinct. Hind wings white. Length of the body 5 lines; of the wings 12 lines.

Canara. In the East India Company's collection.

Subgroup 4.

Alæ anticæ latiusculæ, apud costam rectæ, apice rectangulatæ, margine exteriore vix obliquo.

Group 1.

Fore wings rather broad, straight in front, rectangular at the tips, hardly oblique along the exterior border.

73. Leucania sejuncta.

Mas. *Cinereo-cervina; abdomen fuscum, subglaucescens, apice fasciculatum; alæ anticæ linea transversa exteriore e maculis septem fuscis, guttis marginalibus fuscis; posticæ fuscæ.* Fœm.—*Pallidissime cervina; alæ anticæ vix conspersæ, fascia, exteriore e maculis tribus fuscis, guttis marginalibus nigris, disco subtus fuscescente.*

Male.—Cinereous fawn-colour. Abdomen brown, except at the base, slightly glaucous, tufted at the tip. Fore wings with seven brown spots in a transverse line near the exterior border, where there is a row of brown dots. Hind wings brown. *Female.*—Very pale fawn-colour. Fore wings very indistinctly and minutely speckled, with three brown spots in a transverse line near the exterior border, along which there is a row of black dots; disk beneath brownish. Hind wings not paler than the fore wings. Length of the body 5 lines; of the wings 12—13 lines.

a, *b*. Hindostan. From Archdeacon Clerk's collection.

Isle Tristram da Cunha.

Group 1.

Like the first European group.

74. Leucania exoul.

Pallide cervina; alæ anticæ subconspersæ, striga pallidiore maculata, strigaque obliqua fuscescente exteriore; posticæ pallidiores.

Male. An injured specimen. Pale fawn-colour. Fore wings minutely speckled, with a paler streak, containing some darker marks in the disk, and with an oblique brownish streak by the exterior border. Hind wings paler than the fore wings. Length of the body 5 lines; of the wings 12 lines.

a. Isle Tristan da Cunha.

Australia.

Group 1.

Like the second European group.

Subgroup 1.

Like the first European subgroup.

75. LEUCANIA UDA.

L. punctosæ *simillima; alæ anticæ marginibus late albidis, venis albis, guttis exterioribus bene determinatis; posticæ obscuræ.*

Leucania uda, *Guén. Noct.* i. 80, 111.

Australia.

Subgroup 2.

Alæ anticæ albo vittatæ.

Fore wings striped with white.

76. LEUCANIA CRAMBOIDES.

Fusco-cervina; abdomen pallide cervinum; alæ anticæ linea discali alba intus tenuiore; posticæ paullo pallidiores, ciliis albis.

Leucania Cramboides, *Guén. Noct.* i. 84, 122.

a, *b*. Australia. Presented by Major-General Hardwicke.

Subgroup 3.

Alæ anticæ non vittatæ.

Fore wings not striped.

77. LEUCANIA CILIATA.

Pallidissime cervina; thorax nigro conspersus, fasciis anticis nigricantibus; abdomen testaceum, basi albidum; alæ anticæ fasciis guttularibus tribus punctisque marginalibus nigris, ciliis rufescentibus; posticæ pallide cinereæ, antice albæ, ciliis albis basi pallide rufis.

Very pale fawn-colour. Thorax and fore wings speckled with black, the former with blackish bands in front. Abdomen testaceous, whitish towards the base. Fore wings with a white discal dot, with one interior and with two exterior bands of blackish dots, and with black marginal points; exterior border hardly oblique; ciliæ reddish. Hind wings pale cinereous, white in front; ciliæ

white, pale red towards the base. Length of the body 4 lines; of the wings 10 lines.

a. Sydney. From Mr. Lambert's collection.

78. LEUCANIA INVARIA.

Pallidissime testacea; caput et thorax pallide cervina; alæ posticæ margine latissimo pallide cinereo.

Very pale testaceous. Head and thorax pale fawn-colour. Hind wings with a very broad pale cinereous border. Length of the body 3—4 lines; of the wings 8—10 lines.

a—c. Sydney. From Mr. Lambert's collection.

Subgroup 4.

Alæ anticæ breviuscula, sat angustæ, apice subobtusæ, margine exteriore mediocriter obliquo.

Fore wings somewhat short and narrow, rather obtuse at the tips, moderately oblique along the exterior border.

79. LEUCANIA TRUNCATA.

Pallide cervina; thorax paullo obscurior; abdomen testaceum; alæ anticæ guttis exterioribus nigris vix distinctis, punctis marginalibus bene determinatis; posticæ canæ aut cinereæ.

Pale fawn-colour. Thorax a little darker than the fore wings. Abdomen testaceous. Fore wings, with the exterior transverse line of black dots, very minute and indistinct; marginal black points more distinct. Hind wings hoary or cinereous. Length of the body 4—5 lines; of the wings 9—11 lines.

a—d. Adelaide. Presented by the Entomological Club.

New Zealand.

Group 1.

Like the first European group.

80. LEUCANIA PROPRIA.

Pallide cervina; thorax obscurior, fascia guttulari nigra; alæ anticæ lineis nonnullis nigris discalibus vitta atra basali, vitta anteriore nigra fusco nebulosa guttisque exterioribus et marginalibus; posticæ cinereæ, ciliis pallidioribus.

Pale fawn-colour. Thorax a little darker than the body elsewhere, with a very slight band of black dots. Fore wings with some slight black discal lines, with a deep black basal stripe, a little in front of which there is a black discal stripe shaded with brown; the exterior and marginal black dots as usual. Hind wings slightly cinereous, with paler ciliæ. Length of the body 5 lines; of the wings 12 lines.

a. New Zealand. From Mr. Earl's collection.

Group 2.

Like the second European group.

Subgroup 1.

Alæ anticæ invariæ, sat angustæ, subobtusæ, margine exteriore mediocriter obliquo.

Fore wings unvaried, rather narrow, slightly obtuse at the tips, moderately oblique along the exterior border.

81. Leucania unica.

Pallide cervina; abdomen pallidissimum; alæ anticæ innotatæ, posticæ testaceo-albidæ.

Pale fawn-colour. Abdomen much paler than the thorax. Fore wings without any markings. Hind wings whitish, with a slight testaceous tinge. Much resembles *L. truncata.* Length of the body 4½ lines; of the wings 12 lines.

a. New Zealand. From Mr. Earl's collection.

Sandwich Islands.

Group 1.

Like the first European group.

82. Leucania dislocata.

Pallidissime cervina; caput et thorax anticus obscuriora; thorax fascia antica albida; abdomen albido-testaceum; alæ anticæ nigro subconspersæ, linea alba, striga posteriore nigricante, striga diffusa discali nigricante guttisque marginalibus nigris; posticæ cinereæ, ciliis albis.

Very pale fawn-colour. Head and fore part of the thorax

darker than the body elsewhere. Thorax with a whitish band in front. Abdomen whitish testaceous. Fore wings very slightly speckled with black, with a white line as usual on the median vein, behind which there is a blackish streak; a diffuse blackish streak on the discal areolet; a row of black marginal dots. Hind wings cinereous, with white ciliæ. Length of the body 7 lines; of the wings 14 lines.

a. Sandwich Islands. Presented by the Lords of the Admiralty.

Country unknown.

Group 1.

Like the first European group.

83. Leucania aversa.

Pallide cervina; thorax fasciis anticis fuscis; alæ anticæ linea discali alba fusco marginata strigisque exterioribus fuscis albo marginatis; posticæ pallidæ, marginibus latis fuscescentibus.

Pale fawn-colour. Thorax with brown bands in front. Fore wings with a white brown-bordered discal line, and with brown white-bordered exterior streaks. Hind wings pale, with broad brownish borders. Described from an injured specimen. Length of the body 6 lines; of the wings 14 lines.

a. ———?

84. Leucania tenebrifera.

Mas. *Pallide cervina; thorax fasciis duabus anticis nigris; alæ anticæ testaceæ fusco subconspersæ, vitta lata discali diffusa fusca, striga interrupta nigricante exteriore guttisque marginalibus nigris; posticæ canæ, marginibus cinereis nigro guttatis.*

Male. Pale fawn-colour. Thorax with two black bands in front. Fore wings testaceous, slightly speckled with brown, with a broad brown somewhat diffuse stripe in the disk, and with a much interrupted blackish streak in front of the exterior part of this stripe; a row of black marginal dots. Hind wings hoary, slightly cinereous about the borders, where there is a row of indistinct black dots. Length of the body 6 lines; of the wings 13 lines.

a. ———?

Group 2.

Like the second European group.

85. Leucania externa.

Pallide testacea; alæ anticæ fusco subconspersæ, vitta nitente obscure fusca exteriore strigisque pallidioribus fuscis; posticæ albæ opalinæ.

Pale testaceous. Fore wings very thinly speckled with brown, adorned with a dark brown shining stripe, which extends along the exterior half of the wing near the costa, and is accompanied by some paler brown shining streaks. Hind wings white, very pearly. Length of the body 5½ lines; of the wings 13 lines.

a. ———? From Mr. Children's collection.

86. Leucania moderata.

Mas. *Pallide testacea; thorax cervinus, fascia antica pallide testacea; alæ anticæ linea discali albida, guttis tribus anterioribus, lineis tribus posterioribus strigaque brevi obliqua subapicali fuscis; posticæ albidæ, marginibus pallide fuscescentibus.*

Male. Pale testaceous. Thorax fawn-colour, with a broad pale testaceous band in front. Fore wings with a whitish discal line, which has three brown dots in front, and is accompanied along its hinder side by a brown line, and close behind the latter there are two other incomplete parallel brown lines; a short oblique subapical brown streak. Hind wings whitish, with pale brownish borders. Length of the body 5 lines; of the wings 12 lines.

a. ———?

87. Leucania interrogans.

Testacea; thorax et alæ anticæ fusco conspersa; alæ anticæ vitta valde diffusa discali fusca, lituris tribus anterioribus obscurioribus testaceo marginatis, guttis marginalibus fuscis; posticæ subcinereæ. Var.—*Alæ anticæ pallidiores, vix notatæ.*

Testaceous. Thorax and fore wings speckled with brown. Fore wings with a very diffuse brown discal stripe, in front of which there are three darker pale testaceous-bordered marks, the first a dot by the base, the second a discal spot, the third exterior and

somewhat like a ?; a row of brown marginal dots. Hind wings somewhat cinereous. *Var.*—Fore wings paler, and with the marks very indistinct. Length of the body 5 lines; of the wings 12 lines.

a, *b*. ———? From Mr. Milne's collection.

Group 3.

Like the third European group.

88. LEUCANIA MORIBUNDA.

L. Phragmitidis *simillima, minor; alæ anticæ unicolores, minus acutæ, non falcatæ; posticæ subnigricantes.*

Leucania moribunda, *Guén. Noct.* i. 95, 150.

———?

Genus 5. SESAMIA.

Corpus robustum. Proboscis brevis. Palpi porrecti, caput superantes; articulus 3us longi-conicus, 2i triente vix brevior. Antennæ graciles, filiformes. Abdomen alas posticas triente superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam subrectæ, apice angulatæ, margine exteriore subobliquo. *Mas.*—Antennæ subciliatæ. *Fœm.*—Antennæ simplices.

Nonagria, p., *Duponch; Boisd.; Guén. olim.*
Leucania, p., *Herr.-Schæff.*
Sesamia, *Guén. Noct.* i. 95.

Body stout. Proboscis short. Palpi porrect, extending somewhat beyond the head; third joint elongate-conical, nearly one-third of the length of the second. Antennæ slender, filiform. Abdomen extending for one-third of its length beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings almost straight in front, nearly rectangular at the tips, very slightly oblique along the exterior border. *Male.*—Antennæ minutely ciliated. *Female.*—Antennæ simple.

1. Sesamia nonagrioides.

Testacea; alæ anticæ striga discali margineque exteriore obscurioribus; gutta discali punctisque exterioribus nigris; posticæ albæ.

Cossus nonagrioides, *Lefebv. Ann. Soc. Linn.* vi. 98, pl. 5.
Nonagria hesperica, *Ramb. Faun. Andal. Guén. Ann. Soc. Ent. Fr.* vi. 237. *Boisd. Ind. Méth.* 134, 1084. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 470, pl. 41, f. 2.
Leucania Hesperica, *Herr.-Schæff. Schmett. Eur.* ii. 237, 168; ii. *Noct.* pl. 67, f. 344, 345.
Sesamia nonagrioides, *Guén. Noct.* i. 96, 151.

South France. Andalusia. Sicily.

Genus 6. MELIANA.

Corpus gracile. Proboscis brevis. Palpi graciles, ascendentes; articulus 3us conicus, minimus. Antennæ simplices, graciles, corporis dimidio longiores. Abdomen alas posticas superans. Pedes graciles, longiusculi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ longiusculæ, sat angustæ; anticæ lanceolatæ, acuminatæ, apud costam subconvexæ, margine exteriore perobliquo.

Meliana, *Curt. Brit. Ent.* 201. *Guén. Noct.* i. 96.
Senta, p., *Steph. Ill. Brit. Ent. Haust.* iv.
Chilodes, *Herr.-Schæff.*
Symira, *Treits.*

Body slender. Proboscis short. Palpi slender, ascending; third joint conical, very minute. Antennæ simple, slender, more than half the length of the body. Abdomen extending somewhat beyond the hind wings. Legs slender, rather long; hind tibiæ with four moderately long spurs. Wings rather long and narrow. Fore wings lanceolate, slightly convex in front, acuminated at the tips, very oblique along the exterior border; fourth inferior vein remote from the others, which are approximate.

1. Meliana flammea.

Alæ anticæ acutæ, rufescente fuscæ, vitta obscure fusca lineaque transversa exteriore e punctis nigris.

Melia flammea, *Curt. Brit. Ent.* v. pl. 201.
Meliana sericea, *Guén. Noct.* 97, 152.

Senta flammea, *Steph. Ill. Brit. Ent. Haust.* iv. 297. *Cat. Brit. Lep.* 120.
Nonagria arundinicola, *Doubleday, List. Brit. Lep.* 7.

a. England. Presented by — Whitwell, Esq.
b, c. England. From Mr. Stephens' collection.

2. MELIANA DUBIOSA.

Testacea; alæ anticæ lanceolatæ, venis pallidioribus obscurius cinctis, vitta costali lata nivea apicem versus diluta.

Symira dubiosa, *Treit. Schmett. Eur. Suppl.* 86.
Chilodes dubiosa, *Herr.-Schæff. Eur. Schmett.* ii. 226, 138; ii. *Noct.* pl. 69, 356.
Meliana dubiosa, *Guén. Noct.* i. 153.
Meliana flammea?

Hungary.

Genus 7. SENTA.

Corpus gracile. Proboscis brevis. Palpi porrecti; articulus 3us lanceolatus, 2i quadrante non brevior. Antennæ graciles, simplices, corporis dimidio multo longiores. Abdomen alas posticas triente superans. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ; anticæ apud costam subconvexæ, margine exteriore subangulato.

Senta, p., *Steph. Ill. Brit. Ent. Haust.* iii. 279.
Senta, *Guén. Noct.* i. 98.
Nonagria, p., *Ochs.; Treit.; Boisd.; Duponch.*
Chilodes, p., *Herr.-Schæff.*

Body slender. Proboscis short. Palpi porrect; third joint lanceolate, full one-fourth of the length of the second. Antennæ slender, simple, very much more than half the length of the body. Abdomen extending for about one-third of its length beyond the hind wings. Legs rather long and slender; hind tibiæ with four long spurs. Wings rather narrow. Fore wings slightly convex in front, rectangular at the tips; exterior border slightly angular in the middle, the hind side of the angle very oblique; veins much like those of *Meliana*.

1. Senta Ulvæ.

Alæ anticæ obtusæ, sericeæ, rufescente ochraceæ, fusco subconspersæ linea transversa exteriore e punctis fuscis.

Noctua Ulvæ, *Hübn. Samml. Eur. Schmett.* f. 635, 636; 666—668.
Nonagria Ulvæ, *Boisd. Ind. Méth.* 134, 1079.
Chilodes Ulvæ, *Herr.-Schæff. Eur. Schmett.* ii. 226, 137; ii. *Noct.* pl. 77, f. 397.
Melia sericea, *Curt. Brit. Ent.* v. 201.
Meliana sericea, Senta sericea, *Steph. Ill. Brit. Ent. Haust.* iv. 297; *Cat. Brit. Lep.* 120. *Guen. Noct.* i. 98, 154.

Var. *Alæ anticæ cinereæ, annulis duobus discalibus nigris.*

Tortrix bipunctana, *Haw. Trans. Ent. Soc.* i. 357.
Ilythia anella, *Steph. Ill. Brit. Ent. Haust.* iv. 297, 2.

a—h. England. From Mr. Stephens' collection.
i. England.

Genus 8. CŒNOBIA.

Corpus gracile. Palpi graciles, oblique ascendentes; articulus 3us lanceolatus, 2i quadrante non longior. Antennæ graciles. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticis calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice vix angulatæ, margine exteriore subobliquo. *Mas.*—Antennæ subciliatæ. *Fœm.*—Antennæ simplices.

Nonagria, p., *Treit.; Geyer; Duponch.; Boisd.; Herr.-Schæff.*
Phytometra, p.? *Haw.*
Acosmetia, p., *Steph. Ill. Brit. Haust.*
Cœnobia, *Steph. Cat. Brit. Lep.* 121.

Body slender. Palpi slender, obliquely ascending; third joint lanceolate, about one-fourth of the length of the second. Antennæ slender. Abdomen extending for about one-third of its length beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, hardly angular at the tips, slightly oblique along the exterior border. *Male.*—Antennæ minutely ciliated. *Female.*—Antennæ simple.

1. Cænobia despecta.

Testacea aut pallide cervina; alæ anticæ lineis duabus transversis e punctis nigricantibus; posticæ albidæ, testaceo marginatæ.

Noctua despecta, *Hübn. Eur. Schmett. Noct.* pl. 160, f. 751, 752.
Nonagria despecta, *Treit. Schmett. Eur.* ii. 311. *Gey. Samml. Eur. Schmett.* 751, 752. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 355, pl. 32. *Boisd. Ind. Méth.* 134, 1078. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 102, 155. *Herr.-Schæff. Eur. Schmett.* ii. 245, 188; ii. *Nact.* pl. 71, f. 365.
Phytometra rufa? *Haw. Lep. Brit.* 16.
Acosmetia lineola, *Steph. Il. Brit. Haust.* iii. 123, 4.
Acosmetia rufa, *Steph. Ill. Brit. Haust.* iii. 123, 3.
Cænobia rufa, *Steph. Cat. Brit. Lep.* 121.

a—k. England. From Mr. Stephens' collection.
l, m. England.

Genus 9. CARVANCA.

Corpus gracile. Proboscis brevis. Palpi graciles, ascendentes; articulus 3us minimus. Antennæ simplices, sat validæ, corporis dimidio longiores. Abdomen alas posticas vix superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ late ciliatæ; anticæ angustæ, apud costam subconvexæ, apice rotundatæ, margine exteriore vix obliquo.

Body slender. Proboscis short. Palpi slender, ascending; third joint very minute. Antennæ simple, rather stout, more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings with broad ciliæ. Fore wings narrow, slightly convex in front, rounded at the tips, hardly oblique along the exterior border; first, second and third inferior veins contiguous; fourth rather remote. Resembles some of the *Pyralites.*

1. Carvanca trisecta.

Testacea; abdomen albidum; alæ anticæ substrigatæ, nigro subconspersæ, vitta discali tripartita guttisque marginalibus nigris; posticæ albido cineræ, ciliis albis.

Testaceous. Abdomen whitish. Fore wings minutely speckled with black, with very slight and indistinct darker streaks, with a slender black discal stripe, which is twice interrupted, and with

black marginal dots. Hind wings whitish cinereous, with white ciliæ. Length of the body 4 lines; of the wings 10 lines.

a. Nova Scotia. From Lieut. Redman's collection.

Genus 10. NONAGRIA.

Corpus sæpissime robustum. Proboscis brevis. Palpi ultra frontem ascendentes. Antennæ crassiusculæ. Thorax lævis, rotundatus. Abdomen alas posticas superans. Alæ elongatæ, maculis ordinariis sæpius conspicuis. Larva elongata, antice posticeque scutellata, paludicola, capite parvo, in caulibus Graminearum vel Cyperacearum occulte degens. Metamorphosis in caulibus. Pupa capite tuberculo obliquo acuto nasiformi prædita. *Mas.*—Antennæ crenulatæ. *Fœm.*—Antennæ simplices.

Nonagria, *Ochs. Syst. Gloss.; Treit.; Steph.; Guénée, Ann. Soc. Ent. Fr.* vi. 328; *Noct.* 2, 99.
Leucania, p., et Nonagria, *Boisd.; Duponch.; Herr.-Schæff.*

Body generally robust. Proboscis short. Palpi ascending. Antennæ rather stout. Thorax smooth. Abdomen extending beyond the hind wings. Fore wings with the ordinary marks generally visible. *Male.*—Antennæ crenulate. *Female.*—Antennæ simple.

Europe.

Group 1.

Statura sat parva. Corpus vix robustum. Alæ anticæ sæpissime pallidæ, vix notatæ.

Size rather small. Body hardly stout. Fore wings generally pale, with hardly any markings.

1. Nonagria fulva.

Pallide cervina; abdomen sordide albidum; alæ anticæ invariæ, posticæ albidæ, fusco subconspersæ.

Var. *Canescens; alæ fusco subconspersæ, anticæ apud margines posticæque fere totæ cinerascentes.*

Noctua fulva, *Hübn. Samml. Eur. Schmett. Noct.* f. 496. *Duponch. Hist. Nat. Lép. Fr.* 83, pl. 106, f. 4.
Noctua fluxa?? *Hübn. Samml. Eur. Schmett. Noct.* f. 413.
Noctua pygmina? *Haw. Lep. Brit.* 46.

Leucania fluxa, *Steph. Ill. Brit. Ent. Haust.* iii. 77.
Leucania pallida, *Steph. Ill. Brit. Ent. Haust.* iii. 78.
Leucania neurica, *Steph. Ill. Brit. Ent. Haust.* iii. 79.
Nonagria fulva, *Steph. Cat. Brit. Lep.* 121.
Nonagria fluxa, *Treit. Schmett. Eur.* ii. 313; *Suppl.* 94. *Boisd. Ind. Méth.* 134, 1077. *Dup. Suppl.* iii. 351, pl. 32. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 102, 156.
Leucania fulva, *Herr.-Schæff. Eur. Schmett.* ii. 227, 139; ii. *Noct.* pl. 66, f. 332, 333 (extrema).

a—c. England. From Mr. Carter's collection.
d—aa. England. From Mr. Stephens' collection.
bb—dd. England.

2. Nonagria extrema.

Mas. *Cervina; abdomen pallidum; alæ anticæ areola media paullo obscuriore macula centrali pallida; posticæ albidæ.* Fœm.—*Albida; alæ anticæ guttis exterioribus nigris.*

Noctua extrema, *Hübn. Samml. Eur. Schmett. Noct.* f. 412.
Nonagria extrema, *Treit. Schmett. Eur.* ii. 315. *Boisd. Ind. Méth.* 134, 1075. *Guén. Noct.* i. 103, 157.
Leucania extrema, *Meig. Syst. Besch. Eur. Schmett.* iii. 170, 11, pl. 108, f. 14. *Herr.-Schæff. Eur. Schmett.* ii. 228, 140; ii. *Noct.* pl. 66, f. 336, 337.

Germany.

3. Nonagria concolor.

Testaceo-albida; alæ anticæ guttis exterioribus nigricantibus subobsoletis; posticæ subcinerascentes.

Leucania extrema? *Herr.-Schæff. Schmett. Eur.* 228, 140.
Nonagria concolor, *Guén. Noct.* i. 103, 58.

a. England. Presented by T. Shuckard, Esq.
b—g. England. From Mr. Stephens' collection.

4. Nonagria Hellmanni.

Lithargyrea; alæ anticæ area media paullo obscuriore, stigmate medio pallidiore.

Nonagria Hellmanni, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1843; *Faun. Volg-Ural.* 270. *Guén. Noct.* i. 134, 160.

Leucania Hellmannii, *Herr.-Schæff. Eur. Schmett.* ii. 229, 142, ii. *Noct.* pl. 66, f. 338, 339.

Ural Region.

The following specimens may perhaps belong to *N. extrema*.

a, *b*. England. Presented by — Whitwell, Esq.
c, *d*. England. Presented by E. Doubleday, Esq.
e. England. From Mr. Carter's collection.
f, *g*. England. From Mr. Stephens' collection.

5. Nonagria Junci.

N. extremæ *affinis at minor; alæ anticæ pallide stramineæ, vena media infuscata, macula reniformi obsoleta albida; posticæ nigricantes.*

Nonagria Junci, *Boisd. Ind. Méth.* 134, 1076. *Guén. Noct.* i. 105, 161.

West Germany.

6. Nonagria Elymi.

Testacea; alæ anticæ venis loco strigæ posterioris nigro irroratis; posticæ albidæ.

Leucania Elymi, *Treit. Schmett. Eur.* ii. 294. *Boisd. Ind. Méth.* 133, 1072. *Dup. Hist. Nat. Lép. Fr. Suppl.* 334, pl. 31, f. 1. *Herr.-Schæff. Eur. Schmett.* ii. 229, 141; ii. *Noct.* pl. 67, f. 346.

Nonagria Elymi, *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 105, 162.

Prussia.

Group 2.

Corpus sat validum. Palpi porrecti, caput superantes; articulus 3us lanceolatus, 2i dimidio æqualis. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ mediocriter latæ; anticæ apud costam vix convexæ, apice angulatæ, margine exteriore vix obliquo. *Mas.*—Antennæ ciliatæ. *Fœm.*—Antennæ simplices.

Body moderately stout. Palpi porrect, extending some distance beyond the head; third joint lanceolate, about half the length of the second. Abdomen extending for about one-third of its length beyond the hind wings. Legs slender; hind tibiæ with four

Leucania

short spurs. Wings moderately broad. Fore wings hardly convex in front, angular at the tips, hardly oblique along the exterior border. *Male.*—Antennæ ciliated. *Female.*—Antennæ simple.

7. Nonagria neurica.

Pallide cervina; abdomen sordide albidum; alæ anticæ atomis vitta diffusa discali guttisque marginalibus nigris; posticæ cinereæ, basi sordide albidæ.

Noctua neurica, *Hübn. Samml. Eur. Schmett. Noct.* f. 381.
Leucania neurica, *Meig. Syst. Besch. Eur. Schmett.* iii. 171, 13. pl. 109, f. 1.
Nonagria neurica, *Treit. Schmett. Eur.* ii. 319. *Dup. Hist. Nat. Lép. Fr.* iv. 85, pl. 106. *Boisd. Ind. Méth.* 134, 1080. *Herr.-Schæff. Eur. Schmett.* ii. 244, 186; ii. *Noct.* pl. 68, f. 347, 348. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 106, 165. *Steph. Cat. Brit. Lep.* 122.

Germany.
a—d. England. From Mr. Stephens' collection.
e—g. England. From Mr. Foxcroft's collection.
h. England.
i. Europe. From M. Becker's collection.

8. Nonagria dissoluta.

Alæ anticæ nigro-fuscæ, macula reniformi albida intus fusca; posticæ pallidæ.

Nonagria neurica, *var.* dissoluta, *Treit. Schmett. Eur.* ii. 319.
Noctua neurica, *Hübn. Samml. Eur. Schmett. Noct.* f. 559, 561.
Nonagria Hessii, *Boisd. Ind. Méth.* 134, 1081. *Guén. Ann. Soc. Ent. Fr.* vi. 237.
Nonagria dissoluta, *Guén. Noct.* i. 106, 166.

Germany.

Group 3.

Corpus validum. Palpi oblique ascendentes, caput superantes; articulus 3us 2i triente non brevior. Abdomen alas posticas dimidio superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ breviusculæ, mediocriter latæ; anticæ apud costam subrectæ, apice subangulatæ, margine exteriore vix obliquo. *Mas.*—Antennæ vix ciliatæ. *Fœm.*—Antennæ simplices.

Body stout. Palpi obliquely ascending, extending beyond the head; third joint somewhat elongated, full one-third of the length

of the second. Abdomen extending for almost half its length beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather short, moderately broad. Fore wings almost straight in front, slightly angular at the tips, hardly oblique along the exterior border. *Male.*—Antennæ very minutely ciliated. *Female.*—Antennæ simple.

9. Nonagria paludicola.

Cervina; palpi nigri; abdomen cinerascens; alæ anticæ venis nigricantibus albo variis, gutta discali alba punctoque interiore nigro, posticæ cinerascentes, ciliis pallide cervinis.

Noctua paludicola, *Hübn. Samml. Eur. Schmett. Noct.* f. 624, 637.
Noctua guttans, *Hübn. Samml. Eur. Schmett. Noct.* pl. 137, f. 628, 629.
Nonagria paludicola, *Treit. Schmett. Eur.* ii. 321. *Guén. Ann. Soc. Ent. Fr.* ii. 447, pl. 16; *Noct.* i. 106, 167. *Boisd. Icon. des Chen.* ix.; *Ind. Méth.* 135, 1085. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 357, pl. 33. *Herr.-Schæff. Eur. Schmett.* ii. 244, 185.
Noctua Arundineti, *Sepp, Ins.* iv. pl. 20, f. 6, 7.
Noctua geminipuncta, *Hatchet, Ent. Trans.* i. 327, pl. 237, 9, f. 2. *Haw. Lep. Brit.* 45.
Nonagria geminipuncta, *Steph. Ill. Brit. Haust.* iii. 79; *Cat. Brit. Lep.* 122.

a—e. England. Presented by Mr. Longley.
f. England. Presented by S. Stevens, Esq.
g—o. England. From Mr. Stephens' collection.
p, x. Europe. From M. Becker's collection.

Group 4.

Corpus sat robustum. Palpi porrecti, caput superantes; articulus 3us breviusculus. Abdomen alas posticas triente superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. *Mas.*—Antennæ serratæ.

Body rather stout. Palpi porrect, extending beyond the head; third joint rather short. Abdomen extending for full one-third of its length beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings like those of the following group. *Male.*—Antennæ distinctly serrated.

10. Nonagria nexa.

Cervina; abdomen testaceum; alæ anticæ gutta strigaque angulata clavata discalibus albis nigro submarginatis; posticæ subtestaceæ, margine latissimo cinereo.

Noctua nexa, *Hübn. Samml. Eur. Schmett. Noct.* f. 395.
Nonagria nexa, *Treit. Schmett. Eur.* ii. 195; *Suppl.* 97. *Frey. Neu. Beit. Schmett.* ii. pl. 136. *Boisd. Ind. Méth.* 134, 1083. *Herr.-Schæff. Eur. Schmett.* ii. 243, 181; ii. *Noct.* pl. 67, f. 342, 343. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 107, 169.

North Germany. North France.

Group 5.

Corpus robustum. Palpi porrecti, validi, caput paullo superantes; articulus 3us minimus. Abdomen alas posticas dimidio superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ mediocres; anticæ apud costam subrectæ, apice angulatæ, margine exteriore vix obliquo. *Mas.*—Antennæ subciliatæ.

Body stout. Palpi porrect, stout, extending a little beyond the head; third joint very minute. Abdomen extending for about half its length beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings moderately long and broad. Fore wings almost straight in front, angular at the tips, very slightly oblique along the exterior border. *Male.*—Antennæ minutely ciliated. *Female.*—Antennæ simple.

11. Nonagria Cannæ.

Pallide cervina; abdomen pallidissime cervinum; alæ anticæ linea transversa arcuata exteriore e punctis nigricantibus; posticæ subcinereæ, ciliis albidis.

——— ———, *Engr. Pap. d'Eur.* 501, a—d.
Noctua Arundinis, *Hübn. Samml. Schmett. Eur. Noct.* f. 386, 387.
Nonagria Cannæ, *Treit. Schmett. Eur.* ii. 325. *Dup. Hist. Nat. Lép. Fr.* iv. 87, pl. 106; *Suppl.* iii. 361, pl. 33. *Boisd. Ind. Méth.* 135, 1086. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 108. 170. *Westw. & Humph. Brit. Moths*, i. pl. 46, f. 11. *Steph. Cat. Brit. Lep.* 122. *Herr.-Schæff. Schmett. Eur.* ii. 243, 183; ii. *Noct.* pl. 69, f. 354, 355.

Noctua Algæ, *Esp. Schmett.* pl. 140, f. 1, 2. *Bork. Eur. Schmett.* 319.

Leucania Cannæ, *Meig. Syst. Besch. Eur. Schmett.* iii. 171, 14, pl. 108, f. 16.

a—g. England. From Mr. Stephens' collection.
h, *i*. England. From Mr. Foxcroft's collection.
j. England.
k. Europe. From M. Becker's collection.

12. Nonagria Sparganii.

Pallidissime cervina; alæ anticæ gutta maculaque arcuata discalibus lineaque e punctis exteriore transversa abbreviata arcuata nigricantibus; posticæ testaceo-albidæ.

——— ———, *Naturf.* 1777, 30, pl. 3, f. 1. *Engr. Pap. d'Eur.* 502, a.

Noctua Sparganii, *Esp. Schmett.* pl. 148, f. 2, 3. *Bork. Eur. Schmett.* 320. *Hübn. Samml. Eur. Schmett. Noct.* i. f. 549, 550.

Nonagria Sparganii, *Treit. Schmett. Eur.* ii. 323; *Suppl.* 78. *Frey. Neu. Beit. Schmett.* i. pl. 88. *Dup. Hist. Nat. Lép. Fr.* iv. 92, pl. 106. *Boisd. Ind. Méth.* 135, 1087. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 108, 171. *Herr.-Schæff. Eur. Schmett.* ii. 243, 182; ii. *Noct.* pl. 69, f. 352, 353.

Leucania Sparganii, *Meig. Syst. Besch.* iii. 172, 15, pl. 109, f. 2.

a, *b*. Europe. From M. Becker's collection.

13. Nonagria Typhæ.

Cervina; abdomen albido-testaceum; alæ anticæ vitta diffusa discali, strigis lanceolatis submarginalibus guttisque marginalibus nigro-fuscis, venis albidis; posticæ testaceo-albidæ.

——— ———, *Naturf.* 1777, 30, pl. 3, f. 2, 4. *Engr. Pap. d'Eur.* 502, b—f.

Noctua Typhæ, *Esp. Schmett.* pl. 140, f. 3—5. *Bork. Eur. Schmett.* 321. *Hübn. Samml. Eur. Schmett. Noct.* f. 415. *Haw. Lep. Brit.* 35.

Nonagria Typhæ, *Treit. Schmett. Eur.* ii. 327; *Suppl.* 99. *Dup. Hist. Nat. Lép. Fr.* iv. 94, pl. 106. *Frey. Neu. Beit Schmett.* i. pl. 89. *Steph. Ill. Brit. Haust.* iii. 71. *Boisd. Ind. Méth.* 135, 1088. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 108, 172. *Herr.-Schæff. Eur. Schmett.* ii. 244, 184; ii. *Noct.* pl. 68, f. 349—351.

Noctua Arundinis, *Fabr. Mant. Ins.* ii. 141, 54; *Ent. Syst.* iii. 2, 30, 71.
Phalæna-Noctua Arundinis, *Gmel. ed. Syst. Nat.* i. 5, 2546, 1051.
Leucania Typhæ, *Meig. Syst. Besch. Eur. Schmett.* iii. 172, 16, pl. 108, f. 10.
Var. Nonagria fraterna, *Kinderm.*

e—m. England. From Mr. Stephens' collection.
n—p. England.
q—s. Europe. From M. Becker's collection.

14. Nonagria lutosa.

Testacea aut pallide cervina; abdomen albidum; alæ punctis exterioribus nigricantibus; anticæ strigis diffusis cinereis; posticæ albidæ aut subcinereæ.

Noctua lutosa, *Hübn. Samml. Eur. Schmett. Noct.* f. 232.
Noctua crassicornis, *Haw. Lep. Brit.* 173, 36.
Nonagria vectis, *Curt. Brit. Ent.* pl. 459.
Nonagria crassicornis, *Steph. Ill. Brit. Haust.* iii. 72; *Cat. Brit. Lep.* 122. *Guén. Noct.* i. 110, 177.
Nonagria pilicornis, *Steph. Ill. Brit. Haust.* iii. 71, pl. 29, f. 1.
Nonagria Cannæ, *Steph. Ill. Brit. Haust.* iii. 73.
Nonagria Bathyerga, *Boie, Isis. Frey. Neu. Beit. Schmett.* ii. pl. 170, f. 1. *Guén. Ann. Soc. Ent. Fr.* vi. 238.
Leucania Bathyerga, *Boisd. Ind. Méth.* 133, 1068. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 343, pl. 32. *Herr.-Schæff. Eur. Schmett.* ii. 232, 153; ii. *Noct.* pl. 61, 62, f. 307, 312, 13.
Nonagria lutosa, *Guén. Noct.* i. 110, 177.

a. England. Presented by S. Stevens, Esq.
b—n. England. From Mr. Stephens' collection.

Group — ?

15. Nonagria Russa.

Sordide rufo-testacea; ciliæ concolores; alæ anticæ puncto medio nigricante.

Nonagria Russa, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xx. 3, 79, 16.

Sarepta.

North America.

Group 1.

Like the first European group.

16. NONAGRIA INQUINATA.

Testacea; alæ anticæ cervino conspersæ, strigis guttularibus discalibus punctisque marginalibus nigris; posticæ albidæ.

Nonagria inquinata, *Guén. Noct.* i. 104, 159.

a. New York. Presented by E. Doubleday, Esq.

17. NONAGRIA ENERVATA.

Cervino-fusca; abdomen pallide cinereum; alæ anticæ innotatæ, posticæ pallide cinereæ.

Nonagria enervata, *Guén. Noct.* i. 105, 163.

Var. *Pallide cervina; abdomen et alæ posticæ pallidissima; alæ nitentes.* Fœm.—*Alæ anticæ linea basali nigricante, venis exterioribus fuscescentibus punctis marginalibus fuscis elongatis; posticæ marginibus, late fuscescentibus.*

Pale fawn-colour. Abdomen and hind wings very pale. Wings shining. *Female.*—Fore wings with a basal blackish line; exterior veins brownish; marginal brown points elongated. Hind wings with broad brownish borders. Length of the body 5—5½ lines; of the wings 11—12 lines.

a—c. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

18. NONAGRIA FODIENS.

Pallide cervina; abdomen canescens; alæ anticæ subconspersæ, macula divisa discali lineisque duabus transversis exterioribus guttularibus necnon guttis marginalibus nigris, lineolis submarginalibus nigricantibus albido marginatis; posticæ albæ.

Nonagria fodiens, *Guén. Noct.* i. 105, 164.

a—e. Florida. Presented by E. Doubleday, Esq

South America.

Group 1.

Like the third European group.

19. Nonagria stillata.

Mas. *Antennæ ciliatæ; alæ anticæ nigricante cinereæ, striga discali obscuriore, gutta duplicata alba nigro marginata, guttis exterioribus nigris; posticæ albæ, cinereo marginatæ.*

Nonagria stillata, *Guén. Noct.* i. 107, 168.

Brazil?

Group 2.

Alæ robustæ, villosæ.

Zeuzeræ affinis? *Guén.*

Wings, the hind pair especially, stouter and more robust than in the other *Nonagriæ*.

20. Nonagria ossea.

Ochraceo-alba; alæ anticæ nigro subconspersæ, gutta discali guttisque marginalibus nigris; posticæ subobscuriores.

Nonagria ossea, *Guén. Noct.* i. 109, 174.

Brazil.

Group 3.

Antennæ longæ.

Antennæ much longer than in the other species.

Allied to the *Pyralites?*

21. Nonagria? Sacchari.

Testacea; palpi longi (?); antennæ longæ; alæ anticæ nigro conspersæ, vittis tribus incompletis cinereis, gutta discali guttis exterioribus punctisque marginalibus nigris; posticæ pallidiores.

Phalæna-Noctua Sacchari, *Anon. Ins. Surin.* 135, pl. 64.

Surinam. The larva feeds on the pith of the sugar-cane (*Saccharum Officinarum*).

Africa.

Group 1.

22. Nonagria? Vuteria.

Cervina; alæ anticæ guttis duabus discalibus punctisque marginalibus nigris; posticæ albæ.

Phalæna Vuteria, *Stoll, Suppl. Cram. Pap. Exot.* iv. 161, pl. 36 f. 5.

Nonagria Vuteria, *Guén. Noct.* i. 110, 175.

Cape.

This species is perhaps allied to the genus *Antheua* (Cat. Lep Het. 1st Ser. 687, 766), which seems to connect the *Arctiidæ* with the *Leucanidæ*.

Group 2.

Corpus sat validum. Proboscis breviuscula. Palpi ascendentes, caput paullo superantes; articulus 3us conicus minimus. Antennæ graciles, corporis dimidio vix longiores. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ.

Body rather stout. Proboscis rather short. Palpi obliquely ascending, extending a little beyond the head; third joint conical, very small. Abdomen hardly extending beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings moderately broad.

23. Nonagria intestata.

Pallide testacea; alæ fusco subconspersæ; posticæ albæ.

Pale testaceous. Wings thinly and very minutely speckled with brown. Hind wings white. Length of the body 5 lines; of the wings 11 lines.

a. South Africa. Presented by Dr. A. Smith.

Australia.

Group 1.

Like the third European group.

24. Nonagria abdominalis.

Pallide testacea, sat robusta; abdomen fulvum, longiusculum, apice albidum; pedes antici pilosissimi; alæ breviusculæ; anticæ immotatæ; posticæ albæ, iridescentes, margine subtestaceæ.

Pale testaceous, rather stout. Abdomen tawny, rather long, whitish at the tip. Fore legs very pilose. Wings rather short, Fore wings without any markings. Hind wings white, very pearly, slightly testaceous on the border. Length of the body 6 lines; of the wings 12 lines.

a. New Holland.

Genus 11. AITETA.

Corpus crassum. Caput magnum. Proboscis mediocriter longa. Palpi ascendentes; articulus 3us cylindricus, 2i quadrante non brevior. Antennæ simplices, robustæ, corporis dimidio non longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore perobliquo.

Body thick. Head large. Proboscis moderately long. Palpi ascending; third joint cylindrical, full one-fourth of the length of the second. Antennæ simple, robust, about half the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings rather narrow. Fore wings straight in front, rounded at the tips, very oblique along the exterior border; first, second and third inferior veins approximate; fourth moderately remote.

1. Aiteta musculina.

Pallide murina; caput et thorax paullo obscuriora; alæ anticæ gutta discali punctoque posteriore exteriore nigris; posticæ subtus albidæ.

Pale mouse-colour. Head and thorax a little darker. Fore wings with a black discal dot, and with a black point near the hind part of the exterior border; under side paler exteriorly. Hind wings whitish beneath. Length of the body 7 lines; of the wings 15 lines.

a. Philippine Islands. From Mr. Cuming's collection.

Genus 12. PROXENUS.

Corpus sat gracile. Palpi porrecti; articulus 3us cylindricus. Antennæ graciles, simplices, corporis dimidio multo longiores. Abdomen alas posticas triente superans. Alæ anticæ sat angustæ, apud costam subrectæ, apice subobtusæ, margine exteriore vix obliquo.

Nonagria, *Treit.; Frey.; Guén.*
Proxenus, *Herr.-Schæff. Eur. Schmett.* ii. 240.

Body rather slender. Palpi porrect; third joint cylindrical. Antennæ slender, simple, much more than half the length of the body. Abdomen extending for full one-third of its length beyond the hind wings. Fore wings rather narrow, nearly straight in front, somewhat obtuse at the tips, hardly oblique along the exterior border.

1. Proxenus hospes.

Fuscus; alæ anticæ venis nigro alboque obsolete irroratis, striga exteriore fulva, maculis discalibus duabus nigro indicatis; posticæ albæ, apud apices fuscescentes.

Nonagria hospes, *Treit. Schmett. Eur. Suppl.* 90. *Frey. Neu. Beit. Schmett.* pl. 21. *Guén. Noct.* i. 169, 173.
Proxenus hospes, *Herr.-Schæff. Schmett. Eur.* ii. 240, 176; ii. *Noct.* pl. 71, f. 366.

Sicily.

Genus 13. TIMORA.

Mas. Antennæ breves, vix pubescentes. Tibiæ anticæ unguiculis duobus inæqualibus distinctis.

Nonagria, p., *Guén.*

Antennæ short, hardly pubescent in the male. Fore tibiæ with two distinct unequal claws.

1. Timora Senegalensis.

Flavido-albida; thorax antice fusco varius; alæ nitentes; antice roseo conspersæ, vitta lata nigricante lineam albam strigamque roseam includente, guttis apicalibus nigris; posticæ albæ, apice nigro guttatæ.

Nonagria Senegalensis, *Guén. Noct.* i. 110, 176.

Senegal.

Genus 14. ESCHATA.

Corpus sat validum. Caput antice conicum. Proboscis brevis. Palpi porrecti, lanceolati, caput superantes; articulus 3us acuminatus, 2i quadrante brevior. Antennæ simplices, sat validæ, corporis dimidio paullo breviores. Abdomen alas posticas paullo superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ argenteæ, vix falcatæ, costa vix convexa, margine exteriore vix obliquo.

Body moderately stout. Head conical in front. Proboscis short. Palpi porrect, lanceolate, extending somewhat beyond the head; third joint acuminated, less than one-fourth of the length of the second. Antennæ simple, rather stout, a little less than half the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings silvery, hardly convex in front, very indistinctly falcate, almost rectangular at the tips; exterior border hardly oblique; fourth inferior vein nearer than usual to the third.

1. Eschata gelida.

Alba; alæ anticæ argenteæ, apud margines nigro conspersæ, lineis duabus testaceis transversis exterioribus undulatis. Var. β. *Corpus pallide cervinum; alæ anticæ apud discum cervinæ et subauratæ, ciliis auratis.*

White. Fore wings silvery, speckled with black along the exterior border and towards the tip of the costa, with two testaceous transverse exterior undulating lines, the inner one much retracted in front and ending at the middle of the costa; ciliæ slightly gilded hindward. *Var.* β. Body pale fawn-colour. Fore wings with the disk mostly fawn-colour, and slightly gilded; ciliæ brightly gilded. Length of the body 5½—6½ lines; of the wings 12—14 lines.

a, *b*. Silhet. From the Rev. J. Stainforth's collection.
c. Hindostan. From Archdeacon Clerk's collection.

Genus CHASMINA.

This genus, included in the Synopsis with the *Leucanidæ*, appears to be nearer allied to the *Glottulidæ*, and is therefore transferred to that family.

Genus 15. CONTREBIA.

Mas. Corpus sat validum. Caput breve. Proboscis mediocriter longa. Palpi ascendentes, breves, pilosi; articulus 3us minimus. Antennæ graciles, subciliatæ, corporis dimidio non breviores. Abdomen longum, lineare, alas posticas dimidio superans. Pedes longi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, mediocriter latæ; anticæ subhamatæ, acutæ, apud costam rectæ, margine exteriore subconvexo mediocriter obliquo.

Male. Body moderately stout. Head short. Proboscis moderately long. Palpi ascending, short, pilose; third joint very minute. Antennæ slender, minutely ciliated, full half the length of the body. Abdomen long, linear, extending for half its length beyond the hind wings. Legs long, rather slender; hind tibiæ with four long spurs. Wings rather long, moderately broad. Fore wings very slightly hooked, straight in front, acute at the tips, moderately oblique and slightly convex along the exterior border; fourth inferior vein extremely remote from the others.

1. Contrebia extrema.

Pallide cinerea, fusco subconspersa; alæ anticæ lituris nonnullis anticis vittaque apud marginem interiorem fuscis; posticæ fusco-cinereæ.

Pale cinereous, very minutely speckled with brown. Fore wings with some slight brown marks in front, and with an irregular brown stripe near the interior border. Hind wings brownish cinereous. Length of the body 9 lines; of the wings 18 lines.

a. Honduras. From Mr. Dyson's collection.

Genus 16. OBRIMA.

Mas. Corpus sat validum. Proboscis breviuscula. Palpi validi, ascendentes; articulus 3us lanceolatus, 2i quadrante brevior. Antennæ graciles, simplices, corporis dimidio paullo longiores. Abdomen oblanceolatum, alas posticas dimidio superans. Pedes longi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ acuminatæ, subtus basi fasciculatæ, apud costam rectæ, margine exteriore subobliquo.

Male. Body moderately stout. Proboscis rather short. Palpi stout, ascending to the vertex; third joint lanceolate, less than one-

Senecionis

fourth of the length of the second. Antennæ slender, simple, a little more than half the length of the body. Abdomen oblanceolate, extending for half its length beyond the hind wings. Legs long, rather slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings acuminated, straight in front, slightly oblique along the exterior border, tufted beneath at the base; fourth inferior vein moderately remote from the others, which are approximate.

This genus has some characters in common with the *Noctuites* of the second group.

1. Obrima Pyraloides.

Testacea; palpi fulvi, apice testacei; pedes ex parte fulvi; alæ posticæ albidæ, testaceo marginatæ.

Testaceous. Palpi tawny, with testaceous tips. Legs mostly tawny. Hind wings whitish, with testaceous borders. Length of the body 8 lines; of the wings 16 lines.

a. Honduras. From Mr. Dyson's collection.

Genus 17. DEINOPA.

Fœm. Corpus gracile. Proboscis brevis. Palpi ascendentes, sat graciles; articulus 3us minutus, conicus, 2i quadrante brevior. Antennæ simplices, graciles, corpore vix breviores. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ acuminatæ et quadratæ, apud costam subrectæ, margine exteriore subobliquo vix undulato.

Female. Body slender. Proboscis short. Palpi ascending, rather slender; third joint minute, conical, not one-fourth of the length of the second. Antennæ simple, slender, nearly as long as the body. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings rather broad. Fore wings nearly straight in front, rectangular at the tips, slightly oblique and very slightly undulating along the exterior border; first, second and third inferior veins approximate; fourth very remote.

1. Deinopa notabilis.

Pallide cervina; caput et thorax anticus ferrugineo-fusca; alæ anticæ gutta discali maculaque apud angulum interiorem fuscis, punctis marginalibus nigricantibus; posticæ cinereæ.

Leucanidæ

Pale fawn-colour. Head and fore part of the thorax ferruginous-brown. Fore wings with a brown discal dot, with blackish marginal points, and with a brown spot by the interior angle. Hind wings cinereous. Length of the body 3½ lines; of the wings 8 lines.

a. Santarem. From Mr. Bates' collection.

Genus 18. LEUCOPHLEBIA.

Corpus robustum. Proboscis brevis. Palpi breves, validi, pilosi, caput non adæquantes; articulus 3us minimus. Antennæ corporis dimidio paullo breviores. Abdomen alas posticas dimidio superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ longæ, angustæ, dense vestitæ; anticæ lanceolatæ, acuminatæ, apud costam subrectæ, margine exteriore perobliquo. *Mas.*—Antennæ robustæ, serratæ, ciliatæ. *Fœm.*—Antennæ validæ, simplices.

Leucophlebia, *Westw. Cab. Orient. Ent.* 46.

Body stout. Proboscis short. Palpi stout, short, pilose, not extending so far as the head; third joint very minute. Antennæ a little less than half the length of the body. Abdomen extending for about half its length beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings long and narrow, thickly clothed. Fore wings lanceolate, acuminated, nearly straight in front, extremely oblique along the exterior border; first, second and third inferior veins rather remote from each other; third more than twice further from the fourth than from the second. *Male.*—Antennæ very stout, serrated, ciliated. *Female.*—Antennæ stout, simple.

This genus is very remote from the other *Leucanidæ*, and has some affinities with the *Bombycites*, but hardly belongs to any described family of *Lepidoptera Heterocera*.

1. Leucophlebia lineata.

Mas. *Rosea, vitta cervina; alæ anticæ vitta dentata flavescente: posticæ luteæ, roseo marginatæ.* Fœm.—*Corpus albido-testaceum; thoracis discus ferrugineus; alæ anticæ venis 2a 3aque inferioribus albis.*

Leucophlebia lineata, *Westw. Cab. Orient. Ent.* pl. 22.

a. Nepaul. Presented by Major-General Hardwicke.
b. North India.
c. North India.

Fam. 2. GLOTTULIDÆ.

Corpus validum aut gracile. Proboscis brevis. Palpi porrecti, breves; articulus 3us minimus. Antennæ sæpissime simplices. Abdomen non elongatum. Pedes non longi. Alæ latiusculæ; anticæ læte signatæ aut nigræ.

Glottulidæ, *Guén. Noct.* i. 112.

Body stout or slender. Proboscis short. Palpi porrect, short; third joint very small. Antennæ very generally simple. Abdomen not long. Legs of moderate length. Wings generally rather broad. Fore wings black, or with bright colours.

The genus *Callyna*, which Guénée includes in this family, seems rather to belong to the second group of *Noctuites*.

A. Alæ posticæ abdomen non superantes.
  A. Corpus robustum.
    A. Thorax non squamosus.
      a. Thorax non hirsutus.
        i. Tibiæ posticæ calcaribus longis.
          * Alæ anticæ margine exteriore recto obliquo. 1. POLYTELA, *Guén.*
          ** Alæ anticæ margine exteriore convexo, vix obliquo. 6. FRAGARA, *Walk.*
        ii. Tibiæ posticæ calcaribus parvis. 2. GLOTTULA, *Guén.*
      b. Thorax hirsutus. - - 3. EUTHISANOTIA, *Hübn.*
    B. Thorax squamosus.
      a. Palpi capite arcte applicati. - 7. CHASMINA, *Walk.*
      b. Palpi capite non arcte applicati.
        i. Antennæ sat validæ. - - 8. BÆCULA, *Walk.*
        ii. Antennæ graciles. - - 9. DANDACA, *Walk.*
  B. Corpus vix robustum.
    A. Alæ anticæ margine exteriore obliquo. 10. EUDIPNA, *Walk.*
    B. Alæ anticæ margine exteriore valde obliquo. 11. CUBENA, *Walk.*
  C. Corpus sat gracile.
    A. Alæ non longiusculæ.
      a. Antennæ non pectinatæ.
        i. Antennæ non serratæ. - - 4. EUDRYAS, *Boisd.*
        ii. Antennæ *maris* serratæ. - 5. EUGLYPHIA, *Hübn.*
      b. Antennæ *maris* pectinatæ. - - 12. BETUSA, *Walk.*
    B. Alæ longiusculæ. - - - 13. MŒNAS, *Hübn.*
B. Alæ posticæ abdomen superantes. - - 14. CISSUSA, *Walk.*

Genus 1. POLYTELA.

Corpus sat validum. Proboscis breviuscula. Palpi breves, validi, pilosi, porrecti, caput vix superantes; articulus 3us minimus. Antennæ setaceæ, simplices, mediocres. Abdomen alas posticas perpaullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocres; anticæ apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo.

Polytela, *Guén. Noct.* i. 113.

Body moderately stout. Proboscis rather short. Palpi short, stout, pilose, porrect, hardly extending beyond the head; third joint very minute. Antennæ setaceous, moderately long and slender. Abdomen extending very little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, moderately oblique along the exterior border.

1. Polytela Gloriosæ.

Cinereo-nigra; caput apud antennas luteo biguttatum; thoraæ antice cyanescens, postice luteo bimaculatus; abdomen apice croceum; alæ anticæ fasciis denticulatis atris, lineis transversis undulatis guttisque luteo-testaceis, strigis coccineis, maculis duabus marginalibus testaceis ocellisque duabus discalibus; posticæ cinereæ, luteo ciliatæ.

Bombyx Gloriosæ, *Fabr. Sp. Ins.* ii. 205, 150; *Mant. Ins.* ii. 133, 211; *Ent. Syst.* iii. 1, 484, 242. *Oliv. Enc. Méth.* v. 102, 266.

Phalæna-Bombyx Gloriosæ, *Gmel. ed. Syst. Nat.* i. 5, 2440, 578.

Polytela Gloriosæ, *Guén. Noct.* i. 113, 179.

a, *b*. Canara. Presented by S. N. Ward, Esq.
c, *d*. Ceylon. Presented by R. Templeton, Esq.
e. Madras. Presented by W. Elliott, Esq.
f, *g*. North India. Presented by General Hearsay.
h. North India. Presented by E. Doubleday, Esq.
i. North Bengal. Presented by W. W. Saunders, Esq.
j, *k*. North India. From Mr. Stevens' collection.
l. ———? From Mr. Milne's collection.
m. ———?

2. Polytela florigera.

Cyaneo-nigra; proboscis testacea; thorax croceo biguttatus; abdomen apice croceum; alæ anticæ basi croceo uniguttatæ, fasciis denticulatis atris lineisque transversis undulatis albido-ferrugineis, macula apicali albida croceo marginata; posticæ nigro-cinereæ.

Polytela florigera, *Guén. Noct.* i. 114, 180.

Hindostan.

Genus 2. GLOTTULA.

Corpus validum. Proboscis brevis. Palpi breves, pilosi, caput perpaullo superantes; articulus 3us brevissimus. Antennæ breves, simplices, submoniliformes. Abdomen alas posticas triente superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor parvis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo.

Glottula, *Guénée, Ann. Soc. Ent. Fr.* vi. 359; *Noct.* i. 114. *Dup. Cat.*
Cocytia, *Treits.*
Noctua et Hadena, *Boisd.*
Brithys, p., *Hübn.*
Brithya, *Meig.; Boisd. Ind. Méth.*

Body stout. Proboscis short. Palpi pilose, short, extending very little beyond the head; third joint very short. Antennæ short, simple, submoniliform. Abdomen extending for one-third of its length beyond the hind wings. Legs rather stout; hind tibiæ with four short spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins approximate at the base; fourth not very remote from the third.

Europe.

1. Glottula Pancratii.

Nigro-fusca; antennæ fuscæ; abdomen albidum; alæ anticæ fuscæ, albo conspersæ, lineis duabus transversis denticulatis guttisque marginalibus nigricantibus, litura discali fasciaque vix determinata exteriore testaceis; posticæ albæ, margine ex parte fuscescente.

Noctua Pancratii, *Cyrillo, Ent. Neapol.* pl. 12, f. 4. *Hübn. Samml. Eur. Schmett. Noct.* pl. 84, f. 391. *God. Hist. Nat. Lép. Fr.* ii. 272, pl. 70, f. 1, 2.
Brithys Pancratii, *Hübn. Verz. Schmett.* 226, 2264.
Cocytia Pancratii, *Treit. Schmett. Eur.* i. 182; *Suppl.* 29. *Frey. Neu. Beit. Schmett.* ii. pl. 147, f. 1.
Brithya Pancratii, *Herr.-Schæff. Eur. Schmett.* ii. 241, 178.
Glottula Pancratii, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 115, 181.
Noctua (Agrotis) Pancratii, *Meig. Syst. Besch.* iii. 93, 21, pl. 95, f. 3.

South Europe. North Africa.

a—c. Europe. From M. Becker's collection.
d. Greece. From Mr. Stevens' collection.

2. Glottula encausta.

Alæ anticæ pallide cervinæ, limbo acute albidiore, stigmate reniformi limbum versus ferrugineo-cincto.

Noctua encausta, *Hübn. Samml. Eur. Schmett. Noct.* f. 392. *Dup. Hist. Nat. Lép. Fr.* iii. 86, pl. 78; *Suppl.* iii. 213, pl. 20.
Cocytia encausta, *Treit. Schmett. Eur. Suppl.* 29. *Boisd. Icon. Lep. d'Eur.* pl. 84.
Brithya encausta, *Boisd. Ind. Méth.* 117, 910. *Herr.-Schæff. Eur. Schmett.* ii. 241, 179; ii. *Noct.* f. 291.
Glottula encausta, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 116, 182.
Brithys encausta, *Hübn. Verz. Schmett.* 226, 2262.
Glottula Pancratii, *var.?*

Sicily.

South America.

3. Glottula?? Characteria.

Alba; thorax fusco trivittatus; alæ anticæ maculis costalibus, vittisque duabus (anteriore ramosa) fuscis; posticæ maculis submarginalibus fuscis.

Phalæna-Noctua Characteria, *Stoll, Cram. Pap. Exot.* v. 154, pl. 34, f. 5.

Surinam.

This species and *G. Pancratii* can hardly belong to the same genus.

Africa and Asia.

4. Glottula Dominica.

Nigro-fusca; antennæ subtus ferrugineæ; abdomen murinum; alæ anticæ lineis duabus transversis denticulatis guttisque marginalibus nigris, macula discali fasciaque exteriore ferrugineis; posticæ albæ, margine lato fuscescente.

Phalæna-Noctua Dominica, *Cram. Pap. Exot.* iv. 238, pl. 399, f. H.

Hadena Pancratii, *Boisd. Faun. Ent. Mad. Bomb. et Maur. Lép.* 91, 1.

Glottula Dominica, *Guén. Noct.* i. 116, 183.

Cape. Tranquebar. Isle of France.

a—c. Ceylon. Presented by R. Templeton, Esq.
d. Hindostan. From Archdeacon Clerk's collection.
e—g. North India. From Mr. Fraser's collection.
h—j. North India. From Mr. Stevens' collection.

Australia.

5. Glottula atronitens.

Nigra, nitens; proboscis testacea; abdomen cinereum; alæ anticæ linea transversa exteriore e guttis atris; posticæ sordidæ albidæ, cinereo marginatæ.

Black, shining. Proboscis testaceous. Abdomen cinereous. Fore wings with an exterior transverse line of deep black dots. Hind wings dingy whitish, with cinereous borders. Length of the body 5 lines; of the wings 12 lines.

a. Australia. From the Voyage of H.M.S. Rattlesnake.

Genus 3. EUTHISANOTIA.

Corpus robustum. Caput et thorax pilis rigidis erectis vestita. Proboscis breviuscula. Palpi validi, porrecti, obtusi, pilosi; articulus 3us conicus, minimus. Antennæ simplices. Abdominis latera fasciculata. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo. *Mas.*—Abdomen alas posticas triente superans. *Fœm.*—Abdomen alas posticas non superans.

Body stout. Head and thorax thickly clothed with stout, rigid, upright hairs. Proboscis a little longer than the breadth of the head. Palpi stout, porrect, obtuse, hairy; third joint conical, very minute. Antennæ simple. Abdomen smooth above, with tufts of rigid hairs along each side. Legs stout, hairy; hind tibiæ with four rather long spurs. Wings rather broad. Fore wings straight in front, rounded at the tips, moderately oblique along the exterior border; second inferior vein as near to the third as to the first; third nearly four times further from the fourth than from the second. *Male.*—Abdomen extending for one-third of its length beyond the hind wings. *Female.*—Abdomen not extending beyond the hind wings.

1. Euthisanotia Timais.

Nigro-fusca; alæ anticæ maculis duabus discalibus ocellaribus guttisque apicalibus ferrugineis, maculis duabus magnis, una basali, 2a antica media, duabusque minoribus apicalibus, guttisque plurimis nigris.

Phalæna-Noctua Timais, *Cram. Pap. Exot.* iii. 148, pl. 275, f. B.
Euthisanotia Timais (Noctua bombycoides, Diphtera præcipua), *Hübn. Samml. Exot. Schmett.* iii. 39, 295, f. 589, 590.
Xanthopastis Timais, *Hübn. Verz. Schmett.* 211, 2105.
Phalæna-Noctua Amaryllidis, *Anon. Ins. Surinam*, i. 63, pl. 28.
Glottula Timais, *Guén. Noct.* i. 116, 184.
Var.? Glottula heterocampa, *Guén. Noct.* i. 116, 185.

Blackish brown. Proboscis testaceous. Antennæ black above, tawny beneath. Fore wings above pale rose-colour, blackish brown with luteous spots at the base and along the exterior border, and with various blackish brown spots and dots, some of which are confluent in the disk, and are there accompanied by a few luteous spots. Length of the body 7—8 lines; of the wings 18—20 lines.

North America. Surinam.

a. Jamaica. From Mr. Gosse's collection.
b, c. St. Domingo. From Mr. Tweedie's collection.
d. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.
e, f. ——? Presented by E. Doubleday, Esq.
g. ——? Presented by J. G. Children, Esq.
h, i. ——?

Genus 4. EUDRYAS.

Corpus gracile. Proboscis brevis. Palpi porrecti, sat graciles, caput perpaullo superantes; articulus 3us minimus. Antennæ graciles. Abdomen alas posticas perpaullo superans. Pedes sat graciles: tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore subobliquo. *Mas.*—Antennæ subciliatæ. *Fœm.*—Antennæ simplices.

Euthisanotia, p., *Hübn. Exot. Schmett.*
Eudryas, *Boisd. Spec. Gen. Lép.*

Body slender. Proboscis short. Palpi porrect, rather slender, extending very little beyond the head; third joint very minute. Antennæ slender. Abdomen extending very little beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather broad. Fore wings almost straight in front, rounded at the tips, slightly oblique along the exterior border; inferior veins much as usual. *Male.*—Antennæ very minutely ciliated. *Female.*—Antennæ simple.

1. Eudryas Unio.

Pallide flava; caput nigricans; thorax vitta lata nigricante, lateribus albo fasciculatis; abdomen vitta interrupta nigricante, basi cristatum; alæ anticæ albæ, marginis antici bistriente basali posticique bistriente apicali glaucescente puniceis, apice punicea fascia dentata albida, subtus flavæ maculis duabus connexis nigris fasciaque apicali rufescente; alæ posticæ flavæ, margine postico et apicali rufescente linea dentata saturatiore, subtus nigro unimaculatæ.

Euthisanotia Unio (Noctua bombycoides, Dipthera præcipua), *Hübn. Samml. Exot. Schmett.* iii. 12, 216, f. 431, 432.
Eudryas Unio, *Boisd. Spec. Gen. Lép.* i. pl. 14, f. 9.

The fore wings have an olive-green line along the coloured borders of the tip and hind borders, and on the disk are two half-concealed spots of the same colour corresponding to the two black spots beneath.

a—c. Trenton Falls, New York. Presented by E. Doubleday, Esq.
d. ——?

2. Eudryas grata.

Pallide flava; caput nigricans; thorax vitta lata nigricante, lateribus albo fasciculatis; abdomen vitta interrupta nigricante; alæ anticæ albæ maculis duabus anticis unaque postica fuscescentibus olivaceo marginatis, marginis antici plus dimidio basali glaucescente puniceo, apice margineque postico apicali puniceis cyaneo-lineatis olivaceoque intus marginatis, subtus flavæ apice obscuriores maculis duabus basique antica nigris; alæ posticæ flavæ, margine postico rufescente cyaneo vario, subtus nigro unimaculatæ.

Eudryas grata, *MSS.*

a. North America? Presented by E. Doubleday, Esq.
b. ——— ?

3. Eudryas Stæ. Johannis.

Olivacea, subtus flava; thoracis latera albo fasciculata; abdomen flavum, fascia dorsali basali olivacea; alæ anticæ disco ad partem albo olivaceo vario, apice margineque postico apicali late puniceis cyaneo lineatis, subtus flavæ apice obscuriores maculis duabus nigris; alæ posticæ flavæ.

Eudryas Stæ. Johannis, *Stephens, MSS.*

Olive-green. Sides of the thorax tufted with white hairs. Abdomen yellow, with an olive-green dorsal stripe towards the base. Fore wings with some darker marks and with some white streaks towards the base, and with an oblique irregular white discal band, which is widened in front and includes some olive marks; a broad reddish band including an undulating bluish line along the tip and the apical part of the hind border; under side yellow, pale reddish towards the tips, and with two black spots, the one nearer the base much smaller than the other. Hind wings yellow. Legs white; femora and tibiæ striped with white. Length of the body 7 lines; of the wings 22 lines.

North America?

a. "Taken on the door of the church of Horsleydown by Mr. Bydder."

Genus 5. EUGLYPHIA.

Corpus sat gracile. Proboscis brevis. Palpi sat graciles, porrecti, vix pilosi, caput non superantes; articulus 3us minutus, conicus. Antennæ sat breves. Abdomen alas posticas superans. Pedes brevinsculi, sat graciles; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore sat obliquo. *Mas.*—Antennæ serratæ, ciliatæ. *Fœm.*—Antennæ vix serratæ.

Bombyx, p., *Fabr.; Oliv.*
Diphthera, *Hübn. Exot. Schmett.*
Euglyphia. *Hübn. Verz. Schmett.* 203.
Noropsis, *Guén. Noct.* i. 117.

Body rather slender. Proboscis short. Palpi rather slender, porrect, hardly pilose, not extending beyond the head; third joint minute, conical. Antennæ rather short. Abdomen extending for nearly one-third of its length beyond the hind wings. Legs rather short and slender; hind tibiæ with four moderately long spurs. Wings rather broad. Fore wings almost straight in front, rounded at the tips, rather oblique along the exterior border; second inferior vein a little nearer to the first than to the third; third hardly twice further from the fourth than from the second. *Male.*—Antennæ ciliated, distinctly serrated. *Female.*—Antennæ hardly serrated.

1. Euglyphia hieroglyphica.

Pallide flava; thorax vittis tribus nigris metallicis iridescentibus; abdomen nigricans; alæ anticæ striga basali vittisque duabus (una costali, altera obliqua angulata) nigris, metallico iridescentibus; posticæ nigricantes, ciliis albis.

Phalæna hieroglyphica, *Cram. Pap. Exot.* ii. 81, pl. 147, f. D.
Bombyx festiva, *Fab. Sp. Ins.* ii. 194, 109; *Mant. Ins.* ii. 127, 157; *Ent. Syst.* iii. 1, 463, 177. *Oliv. Enc. Méth.* v. 85, 207.
Phalæna-Bombyx festiva, *Gmel. ed. Syst. Nat.* i. 5, 2425, 540.
Diphthera festiva elegans, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iv. *Noctuæ*, i. *Bombycoides*, ii. *Diphtheræ*, A. *Festivæ*, a, f. 1—4.
Euglyphia elegans, *Hübn. Verz. Schmett.* 203, 2048.
Noropsis fastuosa, *Guén. Noct.* i. 117, 186.

a. Brazil. From Mr. Stevens' collection.
b, c. St. Domingo. From Mr. Tweedie's collection.
d, e. Jamaica.

Genus 6. FRACARA.

Corpus robustum, brevinsculum. Antennæ corporis dimidio multo longiores. Abdomen alas posticas non superans. Alæ breviusculæ, latiusculæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore convexo vix obliquo.

Body robust, rather short. Antennæ much more than half the length of the body. Abdomen extending as far as the hind wings. Wings rather short and broad. Fore wings straight along the costa, rounded at the tips, convex and hardly oblique along the exterior border.

1. Fracara viridata.

Viridis; antennæ luteæ; abdomen flavum fasciis luteis; pedes flavi; alæ anticæ cyaneo variæ, plaga discali guttas duas rufas albo marginatis includente nigra; posticæ nigricantes, flavo marginatæ.

Phalæna-Noctua viridata, *Cram. Pap. Exot.* iv. 44, pl. 311, f. D.

Surinam.

Genus 7. CHASMINA.

Corpus sat validum. Caput breve. Proboscis mediocriter longa. Palpi ascendentes, arcte applicati; articulus 3us parvus, obtusus, 2i quadrante brevior. Antennæ simplices, graciles, corporis dimidio longiores. Thorax pilis appressis. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore mediocriter obliquo.

Body moderately stout. Head short. Proboscis moderately long. Palpi ascending to the vertex, closely applied to the head; third joint small, obtuse, less than one-fourth of the length of the second. Antennæ simple, slender, more than half the length of the body. Thorax with closely applied hairs. Abdomen hardly extending beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings almost straight in front, somewhat rounded at the tips; exterior border moderately oblique; first, second and third inferior veins approximate at the base; fourth remote.

1. Chasmina Cygnus.

Candida; caput antice luteum; palpi apice lutei; pedes antici lutei, nigro guttati; alæ nitentes, subargenteæ. Fœm.—*Thorax et alarum margines subtestacei.*

Pure white. Head luteous in front. Palpi with luteous tips. Fore legs luteous, with black dots. Wings shining, slightly silvery. *Female.*—Thorax and borders of the wings with a slight testaceous tinge. Length of the body 5½—6 lines; of the wings 13—14 lines.

a—c. North India. From Mr. Stevens' collection.
d. North India. From Mr. James' collection.
e. ——— ? From Mr. Milne's collection.

2. Chasmina Pavo.

Glauca, fusco conspersa, subtus lutea; caput nigrum luteo fasciatum; palpi testacei, nigro vittati; antennæ fulvæ; thorax testaceo fasciatus; abdomen luteum, maculis ventralibus lateralibus nigris; tibiæ tarsique nigro varia; alæ anticæ fascia media ferruginea intus nigro marginata, dimidio apicali pallide carneo strigis guttisque atris viridi purpureoque ornatis, costæ dimidio basali luteo nigro-guttato; posticæ luteæ.

Glaucous, very minutely speckled with brown, luteous beneath. Head black above, with a luteous band. Palpi testaceous, striped above with black. Proboscis tawny. Antennæ dull tawny. Thorax with a slight testaceous band in front. Abdomen and hind wings luteous, the former with black spots along each side beneath. Tibiæ and tarsi with black spots and bands. Fore wings luteous and dotted with black along the basal part of the costa; apical half of the wings pale flesh-colour, divided from the glaucous part by a ferruginous band, which is bordered with black on its inner side; the apical half contains some black streaks and dots, which are spangled with emerald-green, or blue and purple. Length of the body 8 lines; of the wings 20 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Genus 8. BÆCULA.

Mas. Corpus robustum. Proboscis mediocriter longa. Palpi crassi, ascendentes, pilosi; articulus 3us minimus. Antennæ brevissime setosa-serratæ, corporis dimidio multo longiores. Abdomen

alas posticas vix superans. Pedes robusti, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriore mediocriter obliquo.

Male. Body stout. Proboscis moderately long. Palpi thick, pilose, ascending; third joint very minute. Antennæ very minutely setose-serrate, much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings rather broad. Fore wings hardly convex in front, rounded at the tips, moderately oblique and indistinctly convex along the exterior border; second and third inferior veins united at the base; fourth about twice further from the third than the first is from the second.

1. Bæcula Gallopavo.

Mas. *Cervina; thorax glauco-viridi conspersus; abdomen subcinereum; alæ anticæ nigro conspersæ, ex parte albidæ, purpureo ornatæ, vitta arcuata nigra, apud costam viridi-cervinæ, apice margineque exteriore sordide albidis strigis maculisque viridi-fulvis; posticæ minus variæ.*

Male. Fawn-colour. Plumes of the thorax, except in front, fringed with glaucous-green. Abdomen somewhat cinereous. Fore wings greenish fawn-colour in front, dingy whitish and with greenish fawn-coloured streaks and spots, and with darker dots about the tips and along the exterior border; disk partly whitish in the exterior part, speckled with black, adorned with a curved black stripe, and with purplish reflections. Hind wings much like the fore wings in colour, but without the black stripe, and with very few black speckles. Length of the body 9 lines; of the wings 22 lines.

a. Venezuela. From Mr. Dyson's collection.

2. Bæcula? Cupentia.

Cervina; alæ anticæ fuscæ, guttis nonnullis maculis apud marginem interiorem fasciisque tribus albis, fascia submarginali postice contracta; posticæ pallidiores, basi cervinæ.

Phalæna Cupentia, *Cram. Pap. Exot.* iii. 103, pl. 252, f. E.
Cœnipeta Cupentia, *Hübn. Verz. Schmett.* 260, 2557.

Surinam.

Genus 9. DANDACA.

Fœm. Corpus robustum. Proboscis mediocriter longa. Palpi validi, ascendentes; articulus 3us minimus. Antennæ graciles, simplices, corpore vix breviores. Thorax squamosus. Abdomen alas posticas non superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore subdenticulato subobliquo vix convexo.

Female. Body stout. Proboscis moderately long. Palpi stout, ascending; third joint very minute. Antennæ slender, simple, nearly as long as the body. Thorax squamose. Abdomen extending as far as the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, angular at the tips, hardly convex and very slightly oblique along the exterior border, which is slightly denticulate; first, second and third inferior veins nearly contiguous at the base; third rather remote.

1. Dandaca Columba.

Fœm. *Pallide glauco-viridis; caput et thorax anticus fusca, testaceo varia; abdomen iridescente-cinereum; alæ anticæ fascia, maculis costalibus punctisque ferrugineo-fuscis, fascia exteriore e maculis nigris, disco ex parte semihyalino; posticæ fuscæ, disco basali hyalino.*

Female. Pale glaucous-green. Head and fore part of the thorax brown and testaceous. Abdomen, except at the base, iridescent-cinereous. Fore wings with a ferruginous-brown band before the middle, and with speckles and costal spots of the same hue; also with an imperfect oblique exterior band of black spots; part of the disk semihyaline. Hind wings brown, hyaline in the disk towards the base. Length of the body 5 lines; of the wings 14 lines.

a. North India. From Mr. James' collection.

Genus 10. EUDIPNA.

Corpus vix robustum. Palpi breves. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas non superans. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore sat obliquo.

Acolasis, p., *Hübn. Verz. Schmett.* 256.

Body hardly stout. Palpi short. Antennæ simple, more than half the length of the body. Abdomen not extending beyond the hind wings. Wings rather broad. Fore wings nearly straight in front, rounded at the tips, moderately oblique along the exterior border.

1. EUDIPNA PHASIS.

Nigro-fusca; abdomen pallide fuscum; alæ anticæ pallide subpurpurascentes viridi variæ, lineis transversis nigris unaquæ exteriore alba, plaga costali subapicali nigricante; posticæ apud discum cinereæ, fascia postica abbreviata testacea.

Phalæna Phasis, *Cram. Pap. Exot.* ii. 106, pl. 165, f. B.
Acolasis Phasis, *Hübn. Verz. Schmett.* 256, 2523.
Surinam.

2. EUDIPNA CEDICA.

Fusca; alæ anticæ gutta basali, lineis, fascia arcuata interiore, fascia exteriore fusco lineata antice furcata maculisque duabus submarginalibus albis; posticæ lineis submarginalibus testaceis, macula apud angulum interiorem alba.

Phalæna Cedica, *Cram. Pap. Exot.* iv. 42, pl. 310, f. E.
Surinam.

Genus 11. CUBENA.

Corpus vix robustum. Palpi caput superantes. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas paullo superans. Alæ mediocriter latæ; anticæ apud costam subconvexæ, apice subrotundatæ, margine exteriore perobliquo.

Autographa, p., *Hübn. Verz. Schmett.* 251.

Body hardly stout. Palpi extending beyond the head. Antennæ simple, more than half the length of the body. Abdomen extending beyond the hind wings. Wings moderately broad. Fore wings slightly convex in front, slightly rounded at the tips, very oblique along the exterior border.

This genus does not seem to be allied to the *Plusiæ*, with which Hübner places it.

1. Cubena Polydamia.

Rosco-ferruginea; abdomen fuscum; alæ anticæ maculis, linea transversa interiore fasciisque duabus posticis abbreviatis exterioribus aurato-flavis; posticæ fuscæ.

Phalæna-Noctua Polydamia, *Cram. Pap. Exot.* iv. 242, pl. 400, f. D.
Autographa Polydamia, *Hübn. Verz. Schmett.* 251, 2490.
Surinam.

Genus 12. BETUSA.

Mas. Corpus sat gracile. Proboscis breviuscula. Palpi porrecti, caput sat superantes; articulus 3us lanceolatus, 2o plus quadruplo brevior. Antennæ mediocriter pectinatæ, corporis dimidio multo longiores. Thorax pilis longis vestitus. Abdomen basi fasciculatum, alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longissimis. Alæ latiusculæ, denticulatæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore mediocriter obliquo; posticæ subtus fasciculo longo antico.

Male. Body rather slender. Proboscis rather short. Palpi porrect, extending somewhat beyond the head; third joint lanceolate, not one-fourth of the length of the second. Antennæ moderately pectinated, much more than half the length of the body. Thorax with long hairs. Abdomen extending as far as the hind wings, with a double tuft at the base. Legs slender; hind tibiæ with four very long spurs. Wings rather broad, denticulated. Fore wings nearly straight in front, rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins approximate at the base; fourth moderately remote. Hind wings with a tuft of long hairs in front beneath.

This genus apparently connects the first division of the *Noctuites* with the second, and also with the *Pyralites*.

1. Betusa Phasianus.

Mas. *Testacea; caput et thorax anticus cervina; abdominis fasciculus pallide rufus; alæ anticæ saturate virides, strigis nigris cyaneo ornatis apud marginem exteriorem subviolaceum, costa margineque interiore ex parte luteis; posticæ fuscæ, basi pallidiores, apice testaceæ, maculis duabus nigris subapicalibus cyaneo ornatis.*

Male. Testaceous. Head and fore part of the thorax fawn-colour. Tuft of the abdomen pale red. Fore wings deep green,

partly luteous along the costa and along the interior border, and with black blue-spangled streaks towards the exterior border, which is tinged with lilac, and divided by a luteous line from the fringe, which is still paler. Hind wings brown, paler towards the base, with two black blue-spangled spots near the tips, which are testaceous, and this hue extends in an attenuated streak along part of the exterior border, and is accompanied by a luteous line. Length of the body 7 lines; of the wings 18 lines.

a. Parà. In Mr. J. P. G. Smith's collection.

Genus 13. MAENAS.

Corpus sat gracile. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas non superans. Alæ longiusculæ, non latæ; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriore valde obliquo.

Maenas, *Hübn. Verz. Schmett.* 167.

Body rather slender. Antennæ simple, more than half the length of the body. Abdomen not extending beyond the hind wings. Wings rather long, not broad. Fore wings hardly convex in front, rounded at the tips, very oblique along the exterior border.

1. Maenas Vocula.

Alba; thorax guttis duabus anticis vittisque tribus fuscis; alæ anticæ plagis costalibus, vitta discali ramosa vittaque postica fuscis; posticæ guttis submarginalibus fuscis.

Phalæna-Noctua Vocula, *Stoll, Cram. Pap. Exot.* v. 143, pl. 31, f. 5.
Maenas Vocula, *Hübn. Verz. Schmett.* 167, 1727.

Cape.

2. Maenas Zaide.

Rufescens; alæ anticæ vittis interruptis furcatis albis strigisque nonnullis fuscis; posticæ pallide fuscescentes, vitta abbreviata obscuriore, margine rufescente.

Phalæna Zaide, *Stoll, Cram. Pap. Exot.* v. 161, pl. 36, f. 6.
Maenas Zaide, *Hübn. Verz. Schmett.* 167, 1728.

Cape.

Genus 14. CISSUSA.

Corpus sat gracile. Palpi breves. Antennæ simplices, corporis dimidio paullo longiores. Alæ latiusculæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore sat obliquo vix convexo; posticæ abdomen paullo superantes.

Body rather slender. Palpi short. Antennæ simple, a little more than half the length of the body. Wings rather broad. Fore wings straight in front, rounded at the tips; exterior border moderately oblique, hardly convex. Hind wings extending a little beyond the abdomen.

1. Cissusa Spadix.

Nigro-fusca; abdomen ferruginosum; alæ anticæ guttis duabus subapicalibus nigris, fasciis quatuor rufescentibus, 3a abbreviata, 4a marginali; posticæ cineraæ.

Phalæna-Noctua Spadix, *Cram. Pap. Exot.* iii. 149, pl. 275, f. F.

Virginia.

Fam. 3. APAMIDÆ.

Proboscis distincta. Palpi distincti, ascendentes. Pedes validi; tibiæ non spinosæ. Alæ anticæ obscure, deflexæ.

Noctuidæ, p., *Boisd.*
Hadenidæ, p., *Boisd.*
Orthosidæ, p., *Boisd.*

Size small, or moderate. Proboscis short, or hardly long. Palpi often of two colours, not long; second joint pilose. Antennæ crenulated or ciliated. Thorax robust, often crested. Legs stout; tibiæ not spinose. Fore wings oblong, rather thick, with distinct markings.

Apamidæ, *Guén. Noct.* i. 119.
Xylinidi, p., *Guén. Ann. Soc. Ent. Fr.* viii. 500. *Steph. Cat. Brit. Lep.* 81.
Apamidi, p., *Guén. Ann. Soc. Ent. Fr.* x. 237. *Steph. Cat. Brit. Lep.* 84.
Hadenidi, p., *Guén. Ann. Soc. Ent. Fr.* vii. 201. *Steph. Cat. Brit. Lep.* 91.

A. Statura sat magna aut mediocris. Alæ latiusculæ; anticæ nitentes, nonnunquam læte designatæ. 1. GORTYNIDES, *Dup.*
B. Alæ longiusculæ; anticæ strigatæ, ligni colores. 2. XYLOPHASIDES, *Guén.*
C. Abdomen cristatum. Antennæ *maris* valde ciliatæ. 3. EPISEMIDES, *Guén.*
D. Alæ anticæ apices versus obscuriores. - 4. APAMIDES, *Guén.*

Subfam. 1. GORTYNIDES.

Gortynides, *Duponch; Guén. Noct.* i. 120.

A. Antennæ *maris* non pectinatæ.
  A. Proboscis breviuscula. - - - 1. GORTYNA, *Ochs.*
  B. Proboscis mediocriter longa.
    A. Pedes sat validi. - - - 2. HYDRÆCIA, *Guén.*
    B. Pedes graciles. - - - - 4. MARTHULA, *Walk.*
B. Antennæ *maris* subpectinatæ. - - 3. NEPHELODES, *Guén.*

Genus 1. GORTYNA.

Corpus validum. Proboscis breviuscula. Palpi validi, pilosi, ascendentes; articulus 3us minutus, conicus. Thorax subcristatus. Abdomen alas posticas plus triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore subobliquo vix undulato. *Mas.*—Antennæ crenulatæ. *Fœm.*—Antennæ simplices.

Gortyna, *Ochs. Syst. Gloss. Schmett. Eur.* iv. *Treits. Boisd. Herr.-Schæff. Guénée, Ann. Soc. Ent. Fr.* vi. 329; *Noct.* i. 120.
Ochria, *Hübn. Verz. Schmett.* 233.
Gortyna et Celsia, *Steph.*
Xanthia et Polia, *Boisd.*

Body stout. Proboscis rather short. Palpi stout, pilose, ascending nearly to the vertex; third joint minute, conical. Thorax slightly crested. Abdomen extending for more than one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, angular at the tips, slightly oblique and hardly undulating along the exterior border. *Male.*—Antennæ crenulated, or minutely ciliated. *Female.*—Antennæ simple.

Apaeuidae

Europe.

1. Gortyna lunata.

Cinereo-ferruginea; abdomen cervinum; alæ anticæ ferrugineæ, maculis tribus discalibus albis, 1a interiore postica quadripartita, 2a intermedia annulata, 3a exteriore transversa subarcuata interlineata; posticæ albidæ.

Noctua leucographa, *Scriba, Beit. Ins. Gesch.* iii. 252, pl. 18, f. 1.
Gortyna lunata, *Kindern. & Treit. Frey. Neu. Beit. Schmett.* iii. 263, f. 1; 327, f. 3. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 466, pl. 41, f. 1. *Boisd. Ind. Méth.* 144, 1168. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 121, 187. *Herr.-Schæff. Eur. Schmett.* ii. 219, 115; ii. *Noct.* pl. 23, 24, f. 114, 117, 118.

Var. *Alæ anticæ elongatæ pallide flavidæ ferrugineoque variæ, maculis tribus ordinariis albidis, macula apicali flavescente, bistriga ferruginea; posticæ albidæ; caput et thorax omnino ferruginea.*

Gortyna Borelii, *Pierret, Ann. Soc. Ent. Fr.* vi. 449, pl. 16, f. 5.

France. Corsica. Turkey.

2. Gortyna Xanthenes.

Lutea, cinereo violaceo mixta; alæ posticæ innotatæ, cinerascentes.

Gortyna Xanthenes, *Germ. Faun. Ins. Eur.* xxii. pl. 22. *Herr.-Schæff. Eur. Schmett.* ii. 219, 114; ii. *Noct.* pl. 24, f. 119. *Guén. Noct.* i. 121, 188.

Sicily.

3. Gortyna mæsiaca.

Flava; alæ anticæ acute fusco signatæ, areolis concoloribus, linea undulata basim versus fusco adumbrata; posticæ albidæ, innotatæ.

Gortyna mæsiaca, *Frivaldsky, Herr.-Schæff. Eur. Schmett.* ii. 218, 113; ii. *Noct.* pl. 10, f. 50. *Guén. Noct.* i. 122, 189.
Gortyna flavago, *var.?*

Balkan Mountains.

4. GORTYNA FLAVAGO.

Lutea, ferrugineo varia; abdomen basi albidum; alæ anticæ fulvo conspersæ, fasciis duabus ferrugineis, 1a interiore, 2a marginali apud costam luteo maculata, lineolis duabus transversis undulatis ferrugineis annulisque tribus nigricantibus; posticæ cinereo-albidæ, fascia subcinerea.

——— ———, *Engr. Pap. d'Eur.* 517, a—e. *Harris, Aur.* pl. 35, f. a—c; *V. M.* 39.

Phalæna-Noctua rutilago, *Gmel. ed. Syst. Nat.* i. 5, 2577, 1185.

Noctua flavago, *Wien. Verz.* 86, 5. *Esp. Schmett.* pl. 112, f. 2—4; pl. 176, f. 1. *Bork. Eur. Schmett.* 292. *Hübn. Samml. Eur. Schmett. Noct.* pl. 39, 186, 187. *Sepp. Ins.* i. pl. 3. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 116, f. 2.

Noctua rutilago, *Fabr. Mant. Ins.* ii. 160, 167; *Ent. Syst.* iii. 2, 75, 214.

Noctua ochracea, *Hübn. Beit. Gesch. Schmett.* pl. 2, m.

Noctua ochraceago, *Haw. Lep. Brit.* 234.

Gortyna flavago, *Treit. Schmett. Eur.* v. 2, 335, 3. *Boisd. Ind. Méth.* 144, 1167. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 122, 190. *Steph. Ill. Brit. Ent. Haust.* iii. 70; *Cat. Brit. Lep.* 115. *Herr.-Schæff. Eur. Schmett.* ii. 218, 112. *Westw. & H. Brit. Moths*, i. 213, pl. 47, f. 16, 17.

Phalæna-Noctua Lappina, *Donov. Nat. Hist. Brit. Ins.* x. 35, pl. 340.

Ochria flavago, *Hübn. Verz. Schmett.* 233, 2338.

Noctua (Xanthia) flavago, *Meig. Syst. Besch.* iii. 165, 155, pl. 107, f. 6.

a—h. England. From Mr. Stephens' collection.
i—k. England.
l—q. Europe. From M. Becker's collection.

North America.

A. Alæ anticæ albo maculatæ.
  A. Alæ anticæ pallidæ.
    A. Alæ anticæ fascia exteriore vix flexuosa. - rutila, *Guén.*
    B. Alæ anticæ fascia exteriore valde flexuosa. marginidens, *Guén.*
  B. Alæ anticæ obscuræ.
    A. Alæ posticæ non fasciatæ. - - - limpeda, *Guén.*
    B. Alæ posticæ fasciatæ. - - - - Nebris, *Guén.*
B. Alæ anticæ albo non maculatæ. - - - nitela, *Guén.*

5. Gortyna rutila.

Ferruginea; thorax luteo fasciatus; abdomen testaceum; alæ anticæ ferrugineo conspersæ, fascia exteriore fusca, macula apicali flavescente, gutta basali necnon maculis guttisque discalibus albis; posticæ testaceæ.

Gortyna rutila, *Guén. Noct.* i. 123, 191.

a. Illinois. Presented by E. Doubleday, Esq.
b—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.

6. Gortyna marginidens.

Ferruginea; thorax luteo fasciatus; abdomen testaceum, apice ferrugineum; alæ anticæ luteo subvariæ, gutta basali maculisque discalibus albis, lineis duabus transversis undulatis exterioribus fuscis, lineola subapicali flava; posticæ testaceæ, apud margines rufescentes.

Gortyna marginidens, *Guén. Noct.* i. 123, 192.
G. rutila, *var.?*

a. Illinois. Presented by E. Doubleday, Esq.

7. Gortyna limpida.

Fusca; abdomen pallide fuscescens; alæ anticæ lituris duabus discalibus e guttis albis testaceo variis, linea transversa undulata exteriore pallide fusca; posticæ albido-cinerascentes.

Gortyna limpida, *Guén. Noct.* i. 124, 193.

a—c. Illinois. Presented by E. Doubleday, Esq.

8. Gortyna Nebris.

Fusca; abdomen pallide cinerascens; alæ linea transversa exteriore albida; anticæ lituris duabus discalibus e guttis albis nonnunquam testaceo variis; posticæ cinereæ.

Gortyna Nebris, *Guén. Noct.* i. 124, 194.

a, b. United States. Presented by E. Doubleday, Esq.

alas posticas vix superans. Pedes robusti, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriore mediocriter obliquo.

Male. Body stout. Proboscis moderately long. Palpi thick, pilose, ascending; third joint very minute. Antennæ very minutely setose-serrate, much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings rather broad. Fore wings hardly convex in front, rounded at the tips, moderately oblique and indistinctly convex along the exterior border; second and third inferior veins united at the base; fourth about twice further from the third than the first is from the second.

1. Bæcula Gallopavo.

Mas. *Cervina; thorax glauco-viridi conspersus; abdomen subcinereum; alæ anticæ nigro conspersæ, ex parte albidæ, purpureo ornatæ, vitta arcuata nigra, apud costam viridi-cervinæ, apice marginoque exteriore sordide albidis strigis maculisque viridi-fulvis; posticæ minus variæ.*

Male. Fawn-colour. Plumes of the thorax, except in front, fringed with glaucous-green. Abdomen somewhat cinereous. Fore wings greenish fawn-colour in front, dingy whitish and with greenish fawn-coloured streaks and spots, and with darker dots about the tips and along the exterior border; disk partly whitish in the exterior part, speckled with black, adorned with a curved black stripe, and with purplish reflections. Hind wings much like the fore wings in colour, but without the black stripe, and with very few black speckles. Length of the body 9 lines; of the wings 22 lines.

a. Venezuela. From Mr. Dyson's collection.

2. Bæcula? Cupentia.

Cervina; alæ anticæ fuscæ, guttis nonnullis maculis apud marginem interiorem fasciisque tribus albis, fascia submarginali postice contracta; posticæ pallidiores, basi cervinæ.

Phalæna Cupentia, *Cram. Pap. Exot.* iii. 103, pl. 252, f. E.
Cœnipeta Cupentia, *Hübn. Verz. Schmett.* 260, 2557.

Surinam.

Genus 9. DANDACA.

Fœm. Corpus robustum. Proboscis mediocriter longa. Palpi validi, ascendentes; articulus 3us minimus. Antennæ graciles, simplices, corpore vix breviores. Thorax squamosus. Abdomen alas posticas non superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore subdenticulato subobliquo vix convexo.

Female. Body stout. Proboscis moderately long. Palpi stout, ascending; third joint very minute. Antennæ slender, simple, nearly as long as the body. Thorax squamose. Abdomen extending as far as the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, angular at the tips, hardly convex and very slightly oblique along the exterior border, which is slightly denticulate; first, second and third inferior veins nearly contiguous at the base; third rather remote.

1. Dandaca Columba.

Fœm. *Pallide glauco-viridis; caput et thorax anticus fusca, testaceo varia; abdomen iridescente-cinereum; alæ anticæ fascia, maculis costalibus punctisque ferrugineo-fuscis, fascia exteriore e maculis nigris, disco ex parte semihyalino; posticæ fuscæ, disco basali hyalino.*

Female. Pale glaucous-green. Head and fore part of the thorax brown and testaceous. Abdomen, except at the base, iridescent-cinereous. Fore wings with a ferruginous-brown band before the middle, and with speckles and costal spots of the same hue; also with an imperfect oblique exterior band of black spots; part of the disk semihyaline. Hind wings brown, hyaline in the disk towards the base. Length of the body 5 lines; of the wings 14 lines.

a. North India. From Mr. James' collection.

Genus 10. EUDIPNA.

Corpus vix robustum. Palpi breves. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas non superans. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore sat obliquo.

Acolasis, p., *Hübn. Verz. Schmett.* 256.

Group 2.

2. Hydræcia cuprea.

Fusca; thorax postice canus; tibiæ anticæ setis rufis; alæ anticæ cupreo-fuscæ, fascia latissima strigaque transversa exteriore obscurioribus, ocellis duobus canis; posticæ pallide fuscæ, marginibus latis obscurioribus.

Noctua cuprea, *Wien. Verz.* Y. 3. *Hübn. Samml. Eur. Schmett.* 62.
Apamea cuprea, *Treit. Schmett. Eur.* ii. 125. *God. Hist. Nat. Lép. Fr.* ii. 197, pl. 63. *Frey. Neu. Beit. Schmett.* pl. 75, f. 4.
Gortyna cuprea, *Boisd. Ind.* 144, 1165.
Hydræcia cuprea, *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 1, 127, 198. *Boisd. Ind.* 144, 1165.
Noctua hœmatitidea, *Esp. Schmett.* pl. 182, f. 4.
Lycophotia cuprea, *Hübn. Verz. Schmett.* 215, 2145.

a—d. Europe. From M. Becker's collection.

Group 3.

3. Hydræcia vindelicia.

Fusca; abdomen cinerascens; alæ anticæ linea interiore transversa, fascia media antice furcata fasciaque marginali obscurioribus; posticæ cinerascentes, fascia tenui discali obscuriore.

Noctua vindelicia, *Frey. Neu. Beit. Schmett.* vi. 82, pl. 531, f. 3.
Hydræcia vindelicia, *Herr.-Schæff. Eur. Schmeet.* ii. 220, 118, f. 521—523. *Guén. Noct.* i. 127, 199.

Bavaria.

a, b. Europe. From M. Becker's collection.

Var. *Alæ anticæ obscure fuscæ, fascia saturatiore, stigmatibus pallidioribus; posticæ pallide fuscæ.* Long. alar. 22—24 lin.

Hydræcia Petasitis, *H. Doubleday, Zoologist*, v. 1914. *Steph. Cat. Brit. Lep.* 116.

c. England. From Mr. Carter's collection.
d. England. From Mr. Stephens' collection.
e, f. Scotland. From Mr. Foxcroft's collection.

4. Hydræcia micacea.

Cervina; abdomen testaceo-albidum; alæ anticæ lineis transversis annuloque discali fuscis, fascia obliqua fuscescente; posticæ testaceo-albidæ, linea media subundulata cervina.

——— ———, *Engr. Pap. d'Eur.* 407, a—c.

Noctua micacea, *Esp. Schmett.* pl. 145, f. 6. *Sepp. Ins.* iv. pl. 38, f. 67.

Gortyna micacea, *Treit. Schmett. Eur.* ii. 333. *Dup. Hist. Nat. Lép. Fr.* iv. 243, pl. 115. *Curt. Brit. Ent.* pl. vi. 252. *Steph. Ill. Brit. Haust.* iii. 69; *Cat. Brit. Lep.* 116. *Boisd. Ind. Méth.* 144, 1166.

Hydræcia micacea, *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 128, 200. *Herr.-Schæff. Eur. Schmett.* ii. 220, 117; ii. *Noct.* f. 524.

Noctua Cypriaca, *Hübn. Samml. Eur. Schmett. Noct.* pl. 46, f. 224. *Haw. Lep. Brit.* 227.

a—g. England. From Mr. Stephens' collection.
h, i. England.
j, k. Scotland. From Mr. Foxcroft's collection.

North America.

Group 1.

Like the second European group.

5. Hydræcia lorea.

Testacea; thorax antice fusco varius; alæ anticæ maculis costalibus fuscescentibus, fascia antice dilatata fuscescente lituras duas (exteriorem reniformem) albidas includente; posticæ cinerascentes, testaceo ciliatæ.

Hydræcia lorea, *Guén. Noct.* i. 126, 197.

a—c. New York. Presented by E. Doubleday, Esq.

Group 2.

Like the third European group.

6. Hydræcia immanis.

Testacea; thorax antice fusco varius; alæ anticæ cano-subrufescentes, plaga discali lineis transversis annulisque duobus discalibus ferrugineis; linea exteriore obliqua albida; posticæ testaceæ, fascia tenui fuscescente.

Hydræcia immanis, *Guén. Noct.* i. 128, 201.

a, *b*. New York. Presented by E. Doubleday, Esq.

7. Hydræcia stramentosa.

Testacea; thorax antice linea transversa interrupta fuscescente; alæ anticæ maculis costalibus fuscescentibus, fascia maculis interioribus lineaque transversa exteriore subcervinis.

Hydræcia stramentosa, *Guén. Noct.* i. 129, 202.

a. New York. Presented by E. Doubleday, Esq.

Genus 3. NEPHELODES.

Corpus robustum. Proboscis brevis. Palpi validi, pilosi, oblique ascendentes; articulus 3us minimus. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore subobliquo. *Mas.*—Antennæ subpectinatæ, corporis dimidio paullo breviores. Abdomen alas posticas triente superans. *Fœm.*—Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas perpaullo superans.

Nephelodes, *Guén. Noct.* i. 129.

Body stout. Proboscis short. Palpi stout, pilose, obliquely ascending; third joint very minute. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, angular at the tips, slightly oblique along the exterior border; first, second and third inferior veins approximate at the base: fourth remote. *Male.*—Antennæ minutely pectinated, a little less than half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. *Female.*—Antennæ simple, rather more than half the length of the body. Abdomen extending very little beyond the hind wings.

North America.

1. Nephelodes minians.

Rubida; abdomen testaceum; alæ anticæ guttis costalibus pallidioribus, plaga discali maculas duas includente saturatiore, linea transversa exteriore antice dilatata fuscescente, venis nigricantibus; posticæ cinerascentes, ciliis rufescentibus.

Nephelodes minians, *Guén. Noct.* i. 130, 203.

a—d. Nova Scotia. From Lieut. Redman's collection.
e. Orilla, West Canada. From Mr. Bush's collection.
f, g. ———?

2. Nephelodes? Emmedonia.

Ochracea; abdomen testaceum; alæ anticæ fasciis tribus ferrugineis, 1a arcuata, 2a undulata, 3a lata recta; posticæ cinereæ, testaceo latissimo marginatæ.

Phalæna-Noctua Emmedonia, *Cram. Pap. Exot.* iii. 92, pl. 247, f. D.

N. minians, *var.?*

Virginia.

3. Nephelodes violans.

Cinereo-ferruginosa; abdomen testaceum; alæ anticæ plaga varia discali fasciisque indeterminatis obscurioribus; posticæ cinerascentes, ciliis rufescentibus.

Nephelodes violans, *Guén. Noct.* i. 130, 204.

a, b. New York. Presented by E. Doubleday, Esq.
c—e. Illinois. Presented by E. Doubleday, Esq.

Australia?

4. Nephelodes rubeolans.

Palpi breviores; alæ anticæ rubidæ, lituris distinctioribus, macula discali orbiculata magis determinata, reniformi breviore plus rotundato; posticæ nigricantes, ciliis carneis.

Nephelodes rubeolans, *Guén. Noct.* i. 130, 205.

New Holland?

Genus 4. MARTHULA.

Mas. Corpus vix robustum. Proboscis mediocriter longa. Palpi validi, pilosi, appressi, oblique ascendentes; articulus 3us minimus. Antennæ crenulatæ, corporis dimidio longiores. Abdomen alas posticas dimidio superans, fasciculo apicali angulato. Pedes graciles, vix pilosi; tibiæ posticæ calcaribus quatuor longissimis. Alæ sat angustæ; anticæ apud costam rectæ, apice rectangulatæ, margine exteriore antico non obliquo.

Male. Somewhat resembling *Nonagria*. Body hardly stout. Proboscis moderately long. Palpi stout, pilose, obliquely ascending, applied to the head; third joint extremely minute. Antennæ crenulate, rather more than half the length of the body. Abdomen extending for about half its length beyond the hind wings, with an angular fan-shaped apical tuft. Legs slender, hardly pilose; hind tibiæ with four very long spurs. Wings rather narrow. Fore wings straight in front, rectangular at the tips, not oblique along the fore half of the exterior border; three inferior veins; first and second nearly contiguous, fourth moderately remote.

1. MARTHULA QUADRATA.

Mas. *Rufo-cervina, alæ anticæ lineis nonnullis transversis pallidioribus obliquis subundulatis, guttisque apud marginem exteriorem nigris; posticæ albidæ, marginibus fuscescentibus.*

Male. Reddish fawn-colour. Fore wings with some paler oblique slightly undulating transverse lines, and with a row of black dots near the exterior border. Hind wings whitish, with brownish borders. Abdomen whitish beneath, except towards the tip. Posterior tibiæ and tarsi mostly whitish. Length of the body 8 lines; of the wings 14 lines.

a. Parà. From Mr. Bates' collection.

Subfam. 2. XYLOPHASIDES.

Xylophasides, *Guén. Noct.* i. 131.

A. Proboscis brevissima. - - - 1. SCOLIOCAMPA, *Guén.*
B. Proboscis brevis.
A. Corpus sat gracile. - - - 2. ACHATODES, *Guén.*
B. Corpus vix robustum. - - - 9. LAPHYGMA, *Guén.*

Apamidea

C. Corpus robustum.
A. Palpi caput sat superantes. - - 4. XYLOPHASIA, *Guén.*
B. Palpi caput vix superantes. - 6. XYLOMYGES, *Guén.*
C. Palpi caput non superantes. - 11. CALOGRAMMA, *Guén.*
C. Proboscis mediocriter longa.
A. Palpi articulo 3o brevissimo.
A. Palpi porrecti. - - - 7. APOROPHYLLA, *Guén.*
B. Palpi ascendentes.
a. Alæ anticæ sat angustæ. - - 8. SPODOPTERA, *Guén.* 185
b. Alæ anticæ sat latæ.
i. Alæ anticæ margine exteriore perobliquo.
13. CHIRAPHA, *Walk.* 200
ii. Alæ anticæ margine exteriore sat obliquo.
14. DARGIDA, *Walk.*
B. Palpi articulo 3o longi-conico aut cylindrico.
A. Palpi porrecti.
a. Corpus robustum. - - 5. DIPTERYGIA, *Guén.*
b. Corpus sat gracile. - - - 15. FELTIA, *Walk.*
B. Palpi ascendentes.
a. Palpi articulo 3o longi-conico.
b. Palpi articulo 3o cylindrico. - - 12. NEURIA, *Guén.*
i. Alæ posticæ non semihyalinæ. - 3. AXYLIA, *Hübn.*
ii. Alæ posticæ semihyalinæ. - 10. PRODENIA, *Guén.* 191

Genus 1. SCOLICOCAMPA.

Frons plana, fasciculo acuto. Proboscis brevissima. Palpi bene determinati, porrecti, compressi, validi, securiformes, pilosi, articulis 2o et 3o confusis. Antennæ *maris* pubescentes. Thorax rotundatus, lævis. Pedes valde pilosi; antici breves; postici calcaribus robustis. Alæ integræ, validæ, squamosæ, ciliis longis densis; posticæ vix tenuiores.

Scolicocampa, *Guén. Noct.* i. 131.

Front flattened, with an acute tuft. Proboscis very short. Palpi broad, securiform, pilose, porrect, much developed and compressed; third joint confused with the second. Antennæ of the male pubescent. Legs very pilose. Fore legs short. Hind tibiæ with stout spurs. Wings entire, robust, squamose, with long thick ciliæ. Hind wings hardly more delicate than the fore wings.

1. Scolicocampa ligni.

Palpi fusci, supra carneo strigati; pedes antici fusci; alæ anticæ subcarneo-cinereæ, velutinæ, punctis nonnullis nigris et rufescentibus, annulo orbiculato subobsoleto, reniformi nigricante bene determinato, macula guttisque exterioribus nigris, ciliis rufescentibus nigro guttatis; posticæ fuscescentes, punctis marginalibus nigris, ciliis incarnatis, subtus lunula lineaque discali nigris.

Scolicocampa ligni, *Guén. Noct.* i. 131, 206.

Georgia.

Genus 2. ACHATODES.

Mas. Corpus sat gracile. Proboscis brevis. Palpi porrecti, caput sat superantes; articulus 3us cylindricus, 2i quadrante non brevior. Antennæ simplices, sat validæ, corporis dimidio paullo longiores. Abdomen alas posticas paulle superans, apice fasciculatum. Pedes sat validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore subobliquo.

Achatodes, *Guén. Noct.* i. 132.

Male. Body rather slender. Proboscis short. Palpi porrect, extending some distance beyond the head; third joint cylindrical, full one-fourth of the length of the second. Antennæ simple, rather stout, a little more than half the length of the body. Abdomen extending a little beyond the hind wings, tufted at the tip. Legs rather stout; hind tibiæ with four moderately long spurs. Wings rather broad. Fore wings nearly straight in front, rounded at the tips, slightly oblique along the exterior border; first, second and third inferior veins nearly contiguous at the base; fourth not remote.

1. Achatodes sandix.

Ferruginosa; caput et thorax fulvo varia; alæ anticæ cinereo nebulosæ; fasciis duabus indeterminatis e guttis nigris, macula apicali testaceo-albida; posticæ pallide cinerascentes.

Achatodes sandix, *Guén. Noct.* i. 132, 207.

a—e. Trenton Falls, New York. Presented by E. Doubleday, Esq.
f. Florida. Presented by E. Doubleday, Esq.

Genus 3. AXYLIA.

Corpus validum. Proboscis mediocriter longa. Palpi porrecti, caput superantes; articulus 3us longi-conicus, 2i quadrante brevior. Antennæ corporis dimidio multo longiores. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore mediocriter obliquo. *Mas.*—Antennæ subciliatæ. Abdomen cristatum, alas posticas paullo superans. *Fœm.*—Abdomen alas posticas non superans.

Xylina, p., *Ochs.; Treit.; Meig.; Steph.*
Agrotis, p., *Boisd.; Dup.*
Xylophasia, p., *Guén. Ann. Soc. Ent. Fr.* vi.
Axylia, *Hübn. Verz. Schmett.* 242. *Guén. Noct.* i. 132.

Body stout. Proboscis moderately long. Palpi porrect, extending beyond the head; third joint elongate-conical, not one-fourth of the length of the second. Antennæ much more than half the length of the body. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, slightly rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins approximate; fourth moderately remote. *Male.*—Antennæ minutely ciliated. Abdomen with dorsal crests, extending a little beyond the hind wings. *Female.*—Abdomen not extending beyond the hind wings.

Europe.

1. Axylia putris.

Cervino-testacea; palpi nigro varii; antennæ nigræ; thoracis dorsum cervinum, fascia nigra; alæ anticæ apud costam nigricantes, macula discali guttisque discalibus et marginalibus nigris; posticæ albidæ, gutta discali fusca, lituris marginalibus nigris.

——— ———, *Engr. Pap. d'Eur.* 376, a—c. *Albin, Nat. Hist. Engl. Ins.* pl. 79, f. a—d. *Harr. V. M.* 35.

Phalæna-Noctua putris, *Linn. Faun. Suec.* 1187; *Syst. Nat.* ii. 850. *Gmel. ed. Syst. Nat.* i. 5, 2565, 152. *Turt. Syst. Nat.* iii. 337.

Noctua putris, *Fabr. Sp. Ins.* ii. 240, 147; *Mant. Ins.* ii. 182: *Ent. Syst.* iii. 2, 123, 370. *Esp. Schmett.* iv. pl. 138, f. 45. *Bork. Eur. Schmett.* iv. 329, 136. *Haw. Lep. Brit.* 34.

Xylina putris, *Treit. Schmett. Eur.* iii. 29; vi. 411. *Steph. Ill. Brit. Ent. Haust.* ii. 172; *Cat. Brit. Lep.* 83. *Wood, Ind. Ent.* pl. 11, f. 223. *Meig. Handb.* 175, 71; *Syst. Besch.* iii. 184, 8, pl. 110, f. 3.
Phalæna-Noctua subcorticalis, *Hüfn. Berl. Mag.* iii. 308.
Noctua lignosa, *Hübn. Eur. Schmett. Noct.* pl. 50, f. 245.
Agrotis putris, *Dup. Hist. Nat. Lép. Fr.* vii. 168, pl. 3, f. 1. *Boisd. Ind Méth.* iii. 853.

a—h. England. From Mr. Stephens' collection.
i—l. England.
m—s. Europe. From M. Becker's collection.

Africa.

2. Axylia corrupta.

Caput ferrugineo-flavescens; thorax nigro-cinereus, antice ferrugineo-flavescens; abdomen flavescente-cinereum; alæ anticæ fusco-cinereæ, lineis macnlisque obscurioribus, apud marginem exteriorem ochraceo-flavescentes macula ferrugineo-fusca, ciliis ochraceis fusco notatis; posticæ cinerascentes.

Axylia corrupta, *Guén. Noct.* i. 133, 208.

Senegal.

3. Axylia putrefacta.

Pectus et pedes postici rufescente varia; alæ anticæ oblongæ, integræ, fusco-ochraceæ, conspersæ, margine lineoque discali violaceo-fuscis, maculis obscure fuscis; posticæ semihyalinæ, subiridescentes, margine exteriore lunulato obscuriore.

Axylia putrefacta, *Guén. Noct.* i. 134, 210.

Abyssinia.

4. Axylia tabida.

Nigricans; alæ anticæ ochraceo-flavescentes, carneo suffusæ, margine rufescente-cinereo, annulo reniformi distincto cinereo nigro-lineolato, lineis exterioribus et ciliaribus fuscescentibus; posticæ albæ, apud marginem fuscescentes.

Axylia tabida, *Guén. Noct.* i. 135, 212.

Senegal.

5. Axylia plectilis.

Alæ anticæ fuscæ, sublucentes, vitta lata nigricante, radiis exterioribus fulvo-fuscis, ciliis albo notatis, annulo orbiculari rotundo minimo nigro-lineolato, reniformi majore margine pallidiore; posticæ albæ, ciliis nigro tinctis.

Axylia plectilis, *Guén. Noct.* i. 135, 213.

Sierra Leone.

Country unknown.

6. Axylia sicca.

Pallide flava, parva; alæ anticæ cervino-testaceæ, apud costam nigricantes, macula discali guttisque discalibus et marginalibus nigris; posticæ albæ, subhyalinæ.

Axylia sicca, *Guén. Noct.* i. 135, 211.

Genus 4. XYLOPHASIA.

Corpus robustum. Caput antice subfasciculatum. Proboscis brevis. Palpi porrecti, caput sat superantes; articulus 3us cylindricus, 2i quadrante longior. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas plus minusve superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocres; anticæ strigatæ, lignicolores, apud costam rectæ, apice rotundatæ, margine exteriore subobliquo. *Mus.*—Abdomen apice fasciculatum.

Xylophasia, *Steph. Ill. Brit. Ent. Haust.* ii. 174 *Herr.-Schæff. Guénée, Ann. Soc. Ent. Fr.* vi. 356; *Noct.* i. 135.
Xylina, *Ochs.; Treits.*
Septis, Lithophane et Parastichtis, *Hübn. Verz. Schmett.* 243.
Hadena, Luperina et Asteroscopus, *Boisd.*
Nonagria, p., *Frey.*
Xylophasia et Egira, *Dup.*

Body stout. Head slightly tufted in front. Proboscis short. Palpi porrect, extending some distance beyond the head; third joint cylindrical, more than one-fourth of the length of the second. Antennæ simple, more than half the length of the body. Abdomen extending for one-fourth or one-third of its length beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs.

Wings moderately long and broad. Fore wings streaked generally with testaceous and brown, and having the appearance of dead wood, straight in front, rounded at the tips, slightly oblique along the exterior border. *Male.*—Abdomen tufted at the tip.

1. Xylophasia Zollikofferi.

Fusco-cinerea; alæ anticæ stigmatibus obsoletis, linea undulata denticulata, venis in areola 3a nigro punctatis.

Nonagria Zollikofferi, *Frey. Neu. Beit. Schmett.* ii. 145, pl. 184, f. 1, 2. *Eversm. Faun. Volg-Ural.* 271.
Luperina Zollikofferi, *Boisd. Ind. Méth.* 114, 878. *Guén. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 137, 214.
Xylophasia Zollikofferi, *Dup. Hist. Nat. Lép. Fr. Supp.* iv. 209, pl. 68. *Herr.-Schæff. Eur. Schmett.* ii. 287, 327; ii. *Noct.* pl. 21, f. 103, 104.

Sarepta.

2. Xylophasia lateritia.

Ferruginea; abdomen testaceum; alæ anticæ annulis discalibus albidis, guttis exterioribus et marginalibus nigricantibus; posticæ cinereæ, ciliis testaceis.

Noctua lateritia, *Naturf.* ix. 127. *Esp. Schmett.* pl. 131. *Bork. Eur. Schmett.* 188. *Frey. Neu. Beit. Schmett.* i. pl. 65.
Septis lateritia, *Hübn. Verz. Schmett.* 243, 2421.
Xylina lateritia, *Treit. Schmett. Eur.* iii. 45.
Luperina lateritia, *Boisd. Ind. Méth.* 114, 879.
Xylophasia lateritia, *Dup. Hist. Nat. Lép. Fr.* iv. 208, pl. 113. f. 5. *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 137, 215.
Noctua molochina, *Hübn. Samml. Eur. Schmett.* 741.

a, *b*. Europe. From M. Becker's collection.
c. Nova Scotia. From Lieut. Redman's collection.
d. Newfoundland.

3. Xylophasia rurea.

Testacea; thorax fuscus, ex parte testaceus; alæ anticæ plagis duabus submarginalibus externis una subcostali unaque postica basali fuscis, strigis costalibus fuscis guttisque exterioribus costalibus pallidis, guttis nonnullis oblongis discalibus nigricantibus; posticæ litura discali, fascia tenui margineque lato cinereis.

Var. *Alæ anticæ rufo-fuscæ, annulis duobus discalibus testaceis.*

Noctua rurea, *Fabr. Sp. Ins.* ii. 240, 148; *Mant. Ins.* ii. 184, 307; *Ent. Syst.* iii. 2, 125, 378. *Bork. Eur. Schmett.* iv. 331, 137. *Freyer, Alt. Beitr.* pl. 4, f. 2; *Ent. Zeit. Stett.* ii. 107.
Septis rurea, *Hübn. Verz. Schmett.* 243, 2418.
Xylina rurea, *Treit. Schmett. Eur.* v. 3, 35, 14. *Meig. Handb.* 175, 71; *Syst. Besch.* iii. 185, pl. 110, f. 7.
Noctua putris, *Wien. Verz.* 75, 4. *Hübn. Schmett. Eur. Noct.* pl. 60, f. 241.
Noctua combusta, *Hübn. Schmett. Eur. Noct.* pl. 79, f. 366.
Noctua Alopecurus, *Esp. Schmett.* iv. pl. 147, f. 3.
Noctua luculenta, *Esp. Schmett.* iv. pl. 133, f. 3, 4.
Phalæna (Noctua) rurea, *Gmel. ed. Syst. Nat.* i. 5. 2567, 1145.
Luperina rurea, *Boisd. Ind. Méth.* 114, 880.
Xylophasia rurea, *Steph. Ill. Brit. Ent. Haust.* ii. 176; *Cat. Brit. Lep.* 85. *Dup. Hist. Nat. Lép. Fr.* vii. 197, pl. 113, f. 2. *Westw. & Humph. Brit. Moths*, i. 159, pl. 32, f. 4. *Herr.-Schæff. Eur. Schmett.* ii. 288, 332. *Guén. Noct.* i. 137, 217.
Xylophasia combusta, *Steph. Ill. Brit. Ent. Haust.* ii. 177. *Westw. & H. Brit. Moths*, i. 159, pl. 32, f. 5.
Xylina borealis, *Curt. Brit. Ent.* vi. 256.

Var. *Alæ anticæ rubido-fuscæ, lineis nigris obsoletis, macula orbiculari oblonga fusca nigro-cincta, fusca albo-cincta, fimbria fusca; posticæ fusco-cinereæ, fimbria cinerea.*

Apamea aquila, *Donzel, Ann. Soc. Ent. Fr.* vi. 476, 6, pl. 18, f. 6.
Xylophasia aquila, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 448, pl. 39. *Herr.-Schæff. Eur. Schmett.* ii. 498. *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 138, 218.

a—q. England. From Mr. Stephens' collection.
r—x. England.
y—bb. Europe. From M. Becker's collection.
cc. Trenton Falls, New York. Presented by E. Doubleday, Esq.

4. Xylophasia lithoxylea.

Albida; corpus vitta dorsali testacea; alæ anticæ testaceo diffuse vittatæ, strigis duabus discalibus nonnullisque costalibus et marginalibus fuscescentibus, fascia obliqua e guttis duplicatis nigricantibus; posticæ margine subtestacea, guttis marginalibus fuscescentibus.

——— ———, *Engr. Pap. d'Eur.* 379.
Phalæna-Noctua lithoxylea, *Gmel. ed. Syst. Nat.* i. 5, 2565, 1134.

Noctua lithoxylea? *Wien. Verz.* 75, 2. *Fabr. Mant. Ins.* ii. 182, 299; *Ent. Syst.* iii. 2, 125, 378. *Haw. Lep. Brit.* 25. *Borkh. Schmett.* iv. 324, 134.
Noctua sublustris, *Esp. Schmett.* iv. pl. 133, f. 2.
Noctua musicalis? *Esp. Schmett.* iv. pl. 147, f. 5.
Xylina lithoxylea, *Treit. Schmett. Eur.* iii. 47; vi. 412. *Meig. Syst. Besch.* iii. 185, 9, pl. 110, f. 2.
Xylophasia lithoxylea, *Steph. Ill. Brit. Ent. Haust.* ii. 175. *Dup. Hist. Nat. Lép. Fr.* vii. 175, pl. 3, f. 5. *Cat. Brit. Lep.* 84. *Boisd. Ind. Méth.* 115, 885. *Guén. Noct.* i. 139, 219. *Westw. & H. Brit. Moths*, i. 158, pl. 32, f. 1.
Xylophasia polyodon, *var.*, *Boisd. Ind. Méth.* ed. 1.
Xylophasia sublustris, *Herr.-Schæff. Eur. Schmett.* ii. 288, 331.

a—c. England. Presented by E. Doubleday, Esq.
d—k. England. From Mr. Stephens' collection.
l—n. England.
o—q. Europe. From M. Becker's collection.

5. Xylophasia sublustris.

Pallide cervina; alæ anticæ fascia margineque exteriore ex parte fuscescentibus, lituris discalibus fasciaque exteriore pallidioribus; posticæ cervino-cinereis, fascia pallidiore et obscuriore.

——— ———, *Engr. Pap. d'Eur.* 378, b.
Noctua sublustris, *Esp. Schmett.* iv. pl. 133, f. 1.
Noctua lithoxylea, *Hübn. Samml. Eur. Schmett. Noct.* pl. 49, f. 240.
Septis lithoxylea, *Hübn. Verz. Schmett.* 243, 2416.
Xylophasia sublustris, *Steph. Ill. Brit. Haust.* ii. 175. *Guén. Noct.* i. 139, 220.
Xylophasia musicalis, *Dup. Hist. Nat. Lép. Fr.* iv. 177, pl. 113, f. 1.
Xylophasia lithoxylea, *var.*, *Boisd. Ind. Méth.*, 115, 885.
Xylophasia lithoxylea, *Herr.-Schæff. Eur. Schmett.* ii. 288, 330.

a. England. Presented by J. C. Dale, Esq.
b, *c*. England. From Mr. Carter's collection.
d—j. England. From Mr. Stephens' collection.

6. Xylophasia pulla.

Cinerea; thorax fasciis nigricantibus et albidis; alæ anticæ obscure cinereæ, disco exteriore pallidiore, lituris duabus discalibus elongatis albido marginatis; posticæ albæ, venis exterioribus fuscis.

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Noctua pulla, *Wien. Verz.* 8. *Hübn. Samml. Eur. Schmett.* 138, 692.
Xylophasia pulla, *Dup. Hist. Nat. Lép. Fr.* iv. 226, pl. 114. *Guén. Noct.* i. 142, 228.
Noctua Felixii, *Frey. Neu. Beit. Schmett.* iv. pl. 311.
Xylina pulla, *Treit. Schmett. Eur.* iii. 51. *Herr.-Schæff. Eur. Schmett.* ii. 304, 376. *Steph. Ill. Brit. Ent. Haust.* ii. 170; *Cat. Brit. Lep.* 82. *Westw. & H. Brit. Moths*, i. 154, pl. 31, f. 2.
Lithophane pulla, *Hübn. Verz. Schmett.* 242, 2410.
Asteroscopus pulla, *Boisd. Ind. Méth.* 85, 662.
Egira pulla, *Dup. Cat.* 162.

South France. Austria. Hungary.

a. England. (Epping Forest).

7. Xylophasia petrorhiza.

Cana; thorax vittis duabus obliquis nigris; alæ anticæ lineis variis obscurioribus, vitta late interrupta, litura discali strigisque exterioribus nigris; posticæ albæ, fuscescente marginatæ.

Var. *Alæ anticæ cinereæ, posticæ canæ, fusco marginatæ.*

——— ———, *Engr. Pap. d'Eur.* 283, a—c.
Noctua petrorhiza, *Bork. Eur. Schmett.* iv. 343, 809, 143. *Frey. Beit. Ges. Eur. Schmett.* pl. 113.
Xylina petrorhiza, *Treit. Schmett. Eur.* v. 3, 49, 19; *Suppl.* x. 117. *Meig. Syst. Besch.* iii. 189, 17, pl. 112, f. 10.
Xylophasia petrorhiza, *Dup. Hist. Nat. Lép. Fr.* iv. 223, pl. 114. *Herr.-Schæff. Eur. Schmett.* ii. 288, 333. *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 143, 229.
Noctua comma, *Wien. Verz.* 76, 9. *Hübn. Schmett. Eur. Noct.* pl. 52, f. 251.
Noctua Tanaceti, *Esp. Schmett.* iv. pl. 116, f. 7.
Hadena petrorhiza, *Boisd. Ind. Méth.* 118, 921.

a—c. Europe. From M. Becker's collection.

8. Xylophasia polyodon.

Fuscescens; thorax nigro albidoque varius; abdomen subtestaceum; alæ anticæ lineolis, denticulis exterioribus annulisque duobus discalibus pallidioribus nigrisque, fasciis duabus vix conspicuis pallidioribus, posticæ pallidissime cinereæ, litura discali margineque cinereo-fuscis, ciliis albidis.

——— ———, *Engr. Pap. d'Eur.* 245, a, b; 380, c—e.
Phalæna-Noctua polyodon, *Linn. Syst. Nat.* ii. 853, 170; *Faun. Suec.* 1219. *Gmel. ed. Syst. Nat.* i. 5, 2571, 170.
Noctua polyodon, *Bork. Eur. Schmett.* 109. *Haw. Lep. Brit.* 73.
Noctua radicea, *Wien. Verz.* 81, 15. *Bork. Eur. Schmett.* 570, 235. *Hübn. Samml. Eur. Schmett.* pl. 17, f. 82. *Fabr. Sp. Ins.* ii. 237, 136; *Mant. Ins.* ii. 178, 276; *Ent. Syst.* iii. 2, 124, 306.
Septis polyodon, *Hübn. Verz. Schmett.* 243, 2417.
Xylina polyodon, *Treit. Schmett.* v. 3, 41, 16.
Noctua occulta et monoglypha, *Esp. Schmett.* iv. *Text*, pl. 132, f. 3, 4.
Noctua monoglypha, *Knoch, Beitr.* iii. pl. 5, f. 3—6.
Noctua (Mamestria) polyodon, *Meig. Syst. Besch.* iii. 141, 107, pl. 104, f. 7.
Xylophasia polyodon, *Steph. Ill. Brit. Ent. Haust.* ii. 176. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 111, f. 4. *Guén. Noct.* i. 144, 230. *Westw. & H. Brit. Moths*, i. 158, pl. 32, f. 3.
Luperina polyodon, *Boisd. Ind. Méth.* 115, 886.
Hadena polyodon, *Herr.-Schæff. Eur. Schmett.* ii. 279, 298.

a—n. England. From Mr. Stephens' collection.
o—s. England.
t. Scotland. From Mr. Foxcroft's collection.
v, u. Europe. From M. Becker's collection.
w, x. France.

9. Xylophasia hepatica.

Subtestacea; thorax nigro varius; alæ anticæ fuscescente submebulosæ, guttis costalibus exterioribus albicantibus, annulis duobus discalibus, strigis guttisque nonnullis nigris, linea transversa angulata submarginali pallida; posticæ pallide subcinereæ, litura discali margineque lato cinereo-fuscis.

——— ———, *Engr. Pap. d'Eur.* 375, b.
Phalæna-Noctua hepatica, *Linn. Syst. Nat.* ii, 853, 169; *Faun. Suec.* 1209. *Clerck, Icon.* pl. 8, f. 3. *Gmel. ed. Syst. Nat.* i. 5, 2571, 169.
Noctua hepatica, *Wien. Verz.* 83, 16. *Fabr. Sp. Ins.* ii. 237, 134; *Mant. Ins.* ii. 177, 271; *Ent. Syst.* iii. 2, 337. *Bork. Eur. Schmett.* 189. *Frey. Brit.* iv. pl. 310.
Noctua characterea, *Hübn. Samml. Eur. Schmett. Noct.* 638, pl. 28, f. 133, 638
Noctua implexa, *Hübn. Eur. Schmett. Noct.* f. 414.
Parastichtis hepatica, *Hübn. Verz. Schmett.* 213, 2120.

Noctua epomidion, *Haw. Lep. Brit.* 170.
Xylophasia epomidion, *Steph. Ill. Brit. Ent. Haust.* ii. 178.
Xylophasia characterea, *Westw. & H. Brit. Moths*, i. 140, pl. 32, f. 6, 7.
Xylina hepatica, *Treit. Schmett.* iii. 39.
Xylophasia hepatica, *Dup. Hist. Nat. Lép. Fr.* vii. 204, pl. 113. *Guén. Noct.* i. 144, 231. *Herr.-Schæff. Eur. Schmett.* ii. 287, 329.
Luperina hepatica, *Boisd. Ind. Méth.* 114, 884.

a, b. England. Presented by E. W. Duck, Esq.
c—e. England. Presented by E. Doubleday, Esq
f—n. England. From Mr. Stephens' collection.
o, p. England. From Mr. Stevens' collection.
q, r. Europe. From M. Becker's collection.

10 XYLOPHASIA SCOLOPACINA.

Pallide cervina, cristis dorsalibus nigricantibus; alæ anticæ guttis, plaga subcostali, macula postica basim versus, strigulis lanceolatis punctisque submarginalibus nigricantibus, fasciis duabus diffusis subinterruptis fuscis, plaga discali albida; posticæ cinereæ.

——— ———, *Engr. Pap. d'Eur.* 377, a—c.
Noctua scolopacina, *Esp. Schmett.* iv. pl. 130, f. 1. *Hübn. Samml. Eur. Schmett. Noct.* f. 460. *Frey. Neu. Beit. Schmett.* i. 121, pl. 64. *Ent. Zeit. Stett.* ii. 107.
Xylina scolopacina, *Treit. Schmett. Eur.* iii. 33; vi. 411; *Suppl.* x. 114.
Xylophasia scolopacina, *Dup. Hist. Nat. Lép. Fr.* iv. 201, pl. 113. *Steph. Ill. Brit. Ent. Haust.* ii. 178; *Cat. Brit. Lep.* 85. *Westw. & H. Brit. Moths*, i. 160, pl. 32, f. 8. *Guén. Noct.* i. 145, 233. *Herr.-Schæff. Eur. Schmett.* ii. 287, 328.
Noctua abbreviata, *Haw. Lep. Brit.* 28, 170.
Luperina Scolopacina, *Boisd. Ind. Méth.* 114, 881.

a—c. England. From Mr. Carter's collection.
d—g. England. From Mr. Stephens' collection.
h. England.
i—m. Europe. From M. Becker's collection.

North America.

A. Alæ anticæ non cinerascentes.
  A. Statura sat magna.
    A. Alæ anticæ obscuræ. - - - apamiformis, *Guén.*
    B. Alæ anticæ pallidiores.
      a. Alæ anticæ nigro non vittatæ. - lignicolora, *Guén.*
      b. Alæ anticæ nigro vittatæ.
        i. Alæ anticæ vittis duabus nigris. - verbascoides, *Guén.*
        ii. Alæ anticæ vitta una nigra.
          * Thorax nigro non vittatus. - indocilis, *Walk.*
          ** Thorax nigro vittatus. - - - infixa, *Walk.*
  B. Statura minor. - - - - - - sectilis, *Guén.*
B. Alæ anticæ cinerascentes.
  A. Statura sat magna.
    A. Alæ anticæ bivittatæ. - - - - cariosa, *Guén.*
    B. Alæ anticæ non vittatæ. - - - libera, *Walk.*
  B. Statura minor. - - - - - - mucens, *Hübn.*

11. Xylophasia apamiformis.

Ferrugineo-fusca; abdomen cinereo-fuscescens; alæ anticæ strigis plagis marginalibus, maculis punctisque nigricantibus, annulo reniformi ex parte testaceo; posticæ cinereæ.

Xylophasia apamiformis, *Guén. Noct.* i. 137, 216.

a. New York. Presented by E. Doubleday, Esq.
b. Philadelphia. Presented by E. Doubleday, Esq.

12. Xylophasia lignicolora.

Testacea, lignicolora; abdomen pallidum; alæ anticæ plus minusve strigatæ, plagis aut strigis discalibus et marginalibus fuscis, annulis discalibus indistinctis; posticæ albidæ aut cinerascentes, marginibus obscurioribus.

Xylophasia lignicolora, *Guén. Noct.* i. 140, 221.

a—g. Trenton Falls, New York. Presented by E. Doubleday, Esq.
h—o. Nova Scotia. From Lieut. Redman's collection.

13. Xylophasia Verbascoides.

Subcervina; thorax vittis duabus ferrugineis nigro marginatis; abdomen pallidum; alæ anticæ punctis vittisque duabus (antica incompleta) nigris, lineolis duabus albidis, una apud areolæ discalis apicem, altera posteriore; posticæ cinerascentes, margine lato obscuriore.

Xylophasia Verbascoides, *Guén. Noct.* i. 141, 224.

a—d. New York. Presented by E. Doubleday, Esq.
e. Orilla, West Canada. From Mr. Bush's collection.

14. Xylophasia sectilis.

Subcervina; thorax vittis duabus obliquis nigricantibus; alæ anticæ lituris costalibus discalibus et marginalibus strigaque apud angulum interiorem nigro-fuscis; posticæ cinereæ, margine obscuriore.

Var. *Alæ anticæ vitta diffusa nigro-fusca.*

Xylophasia sectilis, *Guén. Noct.* i. 141, 225.

a. United States. Presented by E. Doubleday, Esq.

15. Xylophasia mucens.

Pallide lignicolora; alæ anticæ lineolatæ, lituris costalibus, macula discali plagisque marginalibus fuscis; posticæ subcinereæ, marginibus fuscis.

Septis mucens (Noctua genuina, Xylæna communiformis), *Hübn. Samml. Eur. Schmett.* iii. 9, 208, f. 415, 416; *Verz. Schmett.* 243, 2419.

Xylophasia mucens, *Guén. Noct.* i. 142, 226.

Pennsylvania.

e. Florida. Presented by E. Doubleday, Esq.

16. Xylophasia confusa.

Mas. *Obscure fusca; abdomen cinereum; alæ anticæ ocellis duobus discalibus strigisque angulosis submarginalibus pallide subvirescentibus; posticæ cinereæ.*

Auchmis confusa (Noctua genuina, Xylæna communiformis), *Hübn. Samml. Exot. Schmett.* iii. 25, 248; v. 495, 496; *Verz. Schmett.* 243, 2423.
Xylophasia confusa, *Guén. Noct.* i. 142, 227.

Pennsylvania. Carolina.

17. Xylophasia cariosa.

Fusco-cinerea; thorax nigro bivittatus; alæ anticæ annulis duobus discalibus pallidioribus, lituris costalibus, vittis posticis strigisque marginalibus nigris; posticæ ciliis pallidis.

Xylophasia cariosa, *Guén. Noct.* i. 144, 232.

a—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.

18. Xylophasia infixa.

Subcervina; caput et thoracis fascia fuscescentia; alæ anticæ punctis costalibus, vitta discali striga posteriore strigisque exterioribus nigris; posticæ pallide cinereæ, marginibus latis fuscescentibus.

Pale dead wood-colour. Head and band of the thorax brownish. Fore wings with some black costal speckles, with a posterior streak of black speckles, with a black stripe traversing the discal ringlets, and with exterior black streaks. Hind wings pale cinereous, with broad brownish borders. Length of the body 5 lines; of the wings 12 lines.

a. Florida. Presented by E. Doubleday, Esq.

19. Xylophasia indocilis.

Fusco-testacea; thorax nigro bivittatus; alæ anticæ lituris costalibus et basalibus, strigis duabus marginalibus unaque discali angulata ferrugineis nigro variis, lunulis marginalibus atris; posticæ cinereæ, lineis duabus transversis marginibusque latissimis fuscescentibus.

Brownish testaceous. Thorax with a black stripe on each side. Fore wings with ferruginous black-varied marks along the costa and towards the base, with a large angular one which extends between and behind the discal ringlets, and with two on the exterior border, which is adorned with a row of deep black lunules; the large spot forms a right angle hindward, and is bounded on the in-

terior side by a double transverse undulating line; hind wings pale cinereous, with two transverse lines and very broad borders of a brownish hue. Length of the body 5—6 lines; of the wings 12 lines.

a—e. New York. Presented by E. Doubleday, Esq.
f. Massachusetts. From Prof. Sheppard's collection.

20. Xylophasia libera.

Testaceo-cana; thorax fascia vittisque duabus nigris; alæ anticæ disco et margine exteriore ex parte fuscis nigro strigatis, strigis duabus lunulisque marginalibus liturisque costalibus nigris, annulis discalibus nigro marginatis; posticæ cinereæ, ciliis pallidis.

Xylophasia cariosa?

Male. Testaceous hoary. Thorax with a black band in front, and with a black stripe on each side. Fore wings partly brown and streaked with black in the disk and along the exterior border, in the middle of which there are two lanceolate streaks; a row of blackish marks along the costa; discal ringlets with black borders; exterior border with black lunules. Hind wings cinereous, with pale ciliæ. Length of the body 5—6 lines; of the wings 14 lines.

a. New York. Presented by E. Doubleday, Esq.

South America.

21. Xylophasia denterna.

Femora postica basi fasciculo longo lanuginoso rufo aut ochraceo; alæ anticæ pallide ochraceæ, denticulis acutissimis, angulo margineque interioribus, ciliis et denticulo antico fuscis, striga ochracea, macula reniformi quadrata apud medium angustata nebulis olivaceis marginata, litura marginali rufescente; posticæ nigro conspersæ, subiridescentes.

Xylophasia denterna, *Guén. Noct.* i. 140, 222.

Brazil. Colombia.

Resembles *Cucullia Lychnitis.*

22. Xylophasia diminuta.

Mas. X. denternæ *simillima, minor; abdomen omnino ochraceum; alæ anticæ denticulis brevioribus, angulo interno minus conspicuo striga ochracea duplicata diviso, litura marginali nigricante longiore maculam reniformem attingente.*

Xylophasia diminuta, *Guén. Noct.* i. 141, 223.

Brazil.

Genus 5. DIPTERYGIA.

Corpus validum. Proboscis mediocriter longa. Palpi porrecti, longiusculi; articulus 3us cylindricus, 2i triente non brevior. Antennæ simplices, corporis dimidio longiores. Abdomen cristatum, alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore subobliquo.

Calliergis, p., *Hübn. Verz. Schmett.* 244.
Xylina, p., *Treit.; Dup.; Meig.*
Cloantha, *Guén. Ann. Soc. Ent. Fr.*
Luperiua, p., *Boisd.*
Dipterygia, *Steph.; Guén. Noct.* i. 145.

Body stout. Proboscis moderately long. Palpi porrect, longer than in most genera of the first group; third joint cylindrical, about one-third of the length of the second. Antennæ simple, more than half the length of the body. Abdomen crested, extending for full one-fourth of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, somewhat rounded at the tips, slightly oblique along the exterior border; second inferior vein at some distance from the first, contiguous to the third; fourth moderately remote from the third.

1. Dipterygia Pinastri.

Picea; thoracis discus posticus et abdomen testacea; alæ anticæ annulis discalibus strigis lanceolatis interioribus lineisque exterioribus nigris, fascia postica marginali fusco varia intus undulata nigro marginata apicem versus dilatata testacea; posticæ subcinereæ, margine lato obscuriore.

——— ———, *Engr. Pap. d'Eur.* 458, c—e.
Phalæna-Noctua Pinastri, *Linn. Syst. Nat.* 160; *Faun. Suec.* 1188. *Gmel. ed. Syst. Nat.* i. 5, 2568, 160.

Apoamicle

Noctua Pinastri, *Wien. Verz.* 82, 1. *Fabr. Mant. Ins.* ii. 171. 243; *Ent. Syst.* iii. 2, 101, 302. *Knoch, Beitr. Ins.* iii. 78, pl. 4, f. 1—3. *Esp. Schmett.* iv. pl. 107, f. 4. *Donov. Nat. Hist. Brit. Ins.* pl. 347. *Bork. Eur. Schmett.* iv. 394, 160. *Hübn. Samml. Eur. Schmett. Noct.* pl. 51, f. 246. *Haw. Lep. Brit.* 33.

Xylina Pinastri, *Treit. Schmett.* v. 3, 58, 23. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 110, f. 5. *Meig. Handb.* 176, 75; *Syst. Besch.* iii. 187, 13, pl. 110, f. 11.

Dipterygia Pinastri, *Steph. Ill. Brit. Ent. Haust.* ii. 168. *Guén. Noct.* i. 146, 234. *Herr.-Schæff. Eur. Schmett.* ii. 300, 366.

Luperina Pinastri, *Boisd. Ind. Méth.* 114, 883.

Cloantha Pinastri, *Guén. Ann. Soc. Ent. Fr.* viii. 509.

Calliergis Pinastri, *Hübn. Verz. Schmett.* 244, 2429.

e—g. England. From Mr. Stephens' collection.
h—k. England.
l—o. Europe. From M. Becker's collection.

Genus 6. XYLOMYGES.

Corpus robustum. Proboscis brevis. Palpi breves, porrecti, caput vix superantes; articulus 3us minimus. Antennæ corporis dimidio paullo longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ longiusculæ, sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore perobliquo. *Mas.*—Antennæ subciliatæ.

Xylina, p., *Treit.; Meig.; Steph.*
Egira, p., *Dup.*
Luperina, p., *Boisd.*
Xylomyges, *Guén. Noct.* i. 147.
Cloantha, *Guén. Ind.*
Lithophane, p., *Hübn. Verz. Schmett.* 242.
Calliergis, *Hübn. Verz. Schmett.* 244.

Body stout. Proboscis short. Palpi short, porrect, hardly extending beyond the head; third joint very minute. Antennæ a little more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings rather long and narrow. Fore wings straight in front, rounded at the tips, very oblique along the exterior border; second inferior vein contiguous to the third, near the first; fourth moderately remote from the third. *Male.*—Antennæ minutely ciliated.

1. XYLOMYGES CONSPICILLARIS.

Cana; caput et thorax tenuiter nigro fasciata; abdomen fuscescens; alæ anticæ fuscæ, apud discum nigricantes, margine interno strigisque nonnullis discalibus et exterioribus albidis, annulis discalibus venisque ex maxima parte nigris.

VAR. *Alæ anticæ pallide lignicolores, nigro substrigatæ, vitta repanda subobliqua canescente.*

——— ———, *Engr. Pap. d'Eur.* 383, a—d.

Phalæna-Noctua conspicillaris, *Linn. Faun. Suec.* i. 183. *Gmel. ed. Syst. Nat.* i. 5, 2564, 149.

Noctua conspicillaris, *Wien. Verz.* 75, 5. *Esp. Schmett.* pl. 134, f. 4, 6. *Borkh. Eur. Schmett.* 138. *Hübn. Samml. Exot. Schmett. Noct.* pl. 49, f. 236, 237. *Haw. Lep. Brit.* 171.

Xylina conspicillaris, *Treit. Schmett. Eur.* iii. 27. *Meig. Handb.* 174, 69; *Syst. Besch.* iii. 189, 16, pl. 104, f. 12, 13. *Steph. Ill. Brit. Haust.* ii. 169. *Westw. & H. Brit. Moths*, i. 154, pl. 31, f. 1. *Herr.-Schæff. Eur. Schmett.* ii. 303, 371.

Lithophane conspicillaris, *Hübn. Verz. Schmett.* 242, 2409.

Egira conspicillaris, *Dup. Hist. Nat. Lep. Fr.* vii. 149, pl. 110, f. 3, 6.

Egira melaleuca, *Dup. Hist. Nat. Lép. Fr.* vii. pl. 112, f. 6.

Luperina conspicillaris, *Boisd. Ind. Meth.* 115. 887. *Bellier, de la Chavignerie Ann. Soc. Ent. Fr. 2me Sér.* v. *Bull.* xxxiv.

Cloantha conspicillaris, *Guén. Ind.*

Xylomyges conspicillaris, *Guén. Noct.* i. 149, 239.

a—c. England. From Mr. Stephens' collection.
d—f. England.
g, h. Europe. From M. Becker's collection.
i, j. Europe.

North America.

2. XYLOMYGES? ERIDANIA.

Cervina; alæ anticæ strigis posterioribus guttisque ciliaribus albis, maculis duabus discalibus fuscis, vittis duabus exterioribus nigris; posticæ albæ, opalinæ.

Phalæna-Noctua Eridania, *Cram. Pap. Exot.* iv. 133, pl. 358, f. F.

Callierges Eridania, *Hübn. Verz. Schmett.* 244, 2430.

Xylomyges Eridania, *Guén. Noct.* i. 148, 235.

Surinam.

Var. β. *Alæ anticæ non vittatæ.*

Phalæna Phytolaccæ, *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia*, ii. 193, pl. 97.

Phalæna-Noctua Eridania, *Cram. Pap. Exot.* iv. 13, pl. 358, f. E.

West Indies.

3. Xylomyges? Sunia.

Cinerea; caput sat magnum, fronte nigra; antennæ nudæ; abdomen subtus album; alæ anticæ lituris indeterminatis, lineis vix ullis, strigulis marginalibus subarcuatis fere contiguis nigris, ciliis incisuris albis, macula reniformi vix conspicua, orbiculari alba punctiformi; posticæ iridescentes, venarum apicibus margineque angusto nigricantibus.

Xylomyges Sunia, *Guén. Noct.* i. 149, 238.

Isle St. Thomas.

South America.

4. Xylomyges? putrida.

X. Eridania, *var.* Phytolaccæ *simillima, minor; palpi breviores, tenuiores, minus ascendentes; alæ anticæ breviores, plus quadratæ, apice minus acutæ, macula reniformi punctum duplicatum fingente; posticæ plus iridescentes.*

Xylomyges putrida, *Guén. Noct.* i. 148, 236.

Guadeloupe.

5. Xylomyges? amygia.

Iridescente-cinerascens, X. Eridania *simillima; faciis alba; palpi recti; abdomen pilis cinereo-nigris vestitum; alæ anticæ lituris crebrioribus; posticæ venis omnibus apice nigricantibus.*

Xylomyges Amygia, *Guén. Noct.* i. 149, 237.

Brazil.

Genus 7. APOROPHYLLA.

Corpus validum. Proboscis mediocriter longa. Palpi breves, porrecti, caput non superantes; articulus 3us minimus. Antennæ simplices, corporis dimidio multo longiores. Abdomen alas posticas perpaullo superans. Pedes sat graciles; tibiæ posticæ calcaribus

quatuor longis. Alæ sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine interiore subdenticulato mediocriter obliquo.

Aporophylla, *Guén. Ann. Soc. Ent. Fr.* x.; *Noct.* i. 151.
Xylina, p., *Boisd.*
Agrotis, p., *Curt.*
Egira, p., *Dup.*

Body stout. Proboscis moderately long. Palpi short, porrect, not extending beyond the head; third joint very minute. Antennæ simple, much more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather narrow. Fore wings straight in front, rounded at the tips, moderately oblique, indistinctly convex and slightly denticulate along the exterior border; first, second and third inferior veins approximate at the base; fourth remote.

1. Aporophyla australis.

Cinerea; thorax disco obscuriore, linea transversa antica nigra; abdomen albicans; alæ anticæ subcervino variæ, lineolis, strigulis lanceolatis exterioribus lunulisque marginalibus nigris; posticæ canescentes, linea margineque cinerascentibus.

Hadena australis, *Boisd. Ind. Méth.* 118, 920.
Xylina australis, *Ramb. Ann. Soc. Ent. Fr.* i. 291, pl. 9, f. 8. *Guén. Ann. Soc. Ent. Fr.* vi. 246. *Frey. Neu. Beit. Schmett.* iii. 412, pl. 209, f. 4.
Xylina australis, *Herr.-Schæff. Eur. Schmett.* ii. 304, 377; ii. *Noct.* pl. 32, f. 159, 160.
Agrotis pascuea, *Curt. Brit. Ent.* iii. 165. *Westw. & H. Brit. Moths*, i. 123, pl. 24, f. 2.
Aporophyla australis, *Guén. Noct.* i. 151, 240.
Egira australis, *Dup. Hist. Nat. Lép. Fr.* v. 391, pl. 35.

South France. Corsica.

a—d. England. From Mr. Stephens' collection.
e, f. England. From Mr. Turner's collection.
g, h. England.
i, j. Europe. From M. Becker's collection.

2. Aporophyla scriptura.

Cinerea; alæ anticæ lineolis obscurioribus, litura discali flavescente. Mas.—*Alæ anticæ strigis lanceolatis glaucescentibus; posticæ albæ.* Fœm.—*Alæ anticæ linea transversa angulosa glaucescente, fascia exteriore cervina; posticæ albidæ fusco marginatæ.*

Noctua scriptura, *Frey. Neu. Beit. Schmett.* iii. 87, pl. 55, f. 2.
Xylina scriptura, *Herr.-Schæff. Eur. Schmett.* ii. *Noct.* pl. 98, f. 504, 505.
Aporophyla scriptura, *Guén. Noct.* i. 152, 241.
Turkey.

3. APOROPHYLA ORIENTALIS.

Cinerea; alæ anticæ strigis nigricantibus, litura discali guttisque exterioribus et marginalibus flavescentibus. Mas.—*Alæ posticæ albæ.* Fœm.—*Alæ posticæ cinereæ, basi albæ.*

Xylina orientalis, *Herr.-Schæff. Eur. Schmett.* ii. pl. 98, f. 502, 503.
Aporophylla orientalis, *Guén. Noct.* i. 153, 242.
Turkey.

Genus 8. SPODOPTERA.

Corpus vix robustum. Proboscis mediocriter longa. Palpi validi, pilosi, ascendentes; articulus 3us brevissimus. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes validi, antici pilosissimi; tibiæ posticæ calcaribus quatuor longis validissimis. Alæ sat angustæ; anticæ apud costam rectæ, apice subangulatæ, margine exteriore perobliquo.

Spodoptera, *Guén. Noct.* i. 153.
Hadena, p., *Boisd.*

Body hardly stout. Proboscis moderately long. Palpi stout, pilose, ascending; third joint conical, not more than one-fourth of the length of the second. Antennæ simple, more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four long and very stout spurs; fore legs very pilose. Wings somewhat narrow. Fore wings straight in front, slightly angular at the tips, very oblique along the exterior border; second inferior vein much nearer to the first than to the third; fourth moderately remote.

Africa.

1. Spodoptera Abyssinia.

Mas et fœm. *Cinereo fuscescens; palpi cinereo-albi, lateribus nigris; antennæ pubescentes, ciliis verticillatis; alæ anticæ nebulis, macula apicali spatioque medio cinereis, lineis solitis undulatis sat determinatis, maculis discalibus nigris conspicuis completis approximatis, ciliis latis, linea basali flava cinereo marginata, strigulis exterioribus nigris; posticæ albæ.*

Spodoptera Abyssinia, *Guén. Noct.* i. 154, 244.

Abyssinia.

Mauritius.

2. Spodoptera Mauritia.

Alæ anticæ cinereæ, strigis transversis pallidioribus, macula reniformi nigra quadrata plagaque obscura ad apicem; posticæ albidæ, nitentes.

Hadena Mauritia, *Boisd. Faun. Ent. Mad. Bomb. et Maur. Lép.* 92, 3, pl. 13, f. 9.

Spodoptera Mauritia, *Guén. Noct.* i. 153, 243.

Bourbon, Mauritius.

Asia.

3. Spodoptera Nubes.

Fusca; abdomen fusco-cinereum; alæ anticæ guttis marginalibus lineisque transversis undulatis nigris, plaga oblonga furcata discali lineaque transversa exteriore angulata albis; posticæ albæ, fusco marginatæ.

Spodoptera Nubes, *Guén. Noct.* i. 155, 246.

Hindostan. Java. Otaheite.

4. Spodoptera Pecten.

Pallide fuscescens; thorax fasciis duabus obscurioribus unaque albido; abdomen et alæ posticæ alba; alæ anticæ maculis costalibus, lineis transversis undulatis liturisque discalibus pallidioribus et obscurioribus, guttis marginalibus nigris.

Spodoptera Pecten, *Guén. Noct.* i. 155, 247.

Java.

5. SPODOPTERA FILUM.

Pallide fusca; abdomen cinerascens; alæ anticæ guttis costalibus, lineis transversis undulatis annuloque discali pallidioribus et obscurioribus, macula discali nigro-fusca, guttis marginalibus nigris; posticæ albæ, fusco marginatæ.

Spodoptera filum, *Guén. Noct.* i. 155, 248.

Java.

6. SPODOPTERA CILIUM.

Pallide fusca; thorax fascia undulata nigricante; alæ anticæ annulis duobus discalibus lineisque transversis undulatis pallidioribus et nigricantibus, guttis marginalibus nigris; posticæ albæ.

Spodoptera cilium, *Guén. Noct.* i. 156, 249.

Java.

Oceania.

7. SPODOPTERA ACRONYCTOIDES.

Alæ anticæ rufo-cinereæ, sat angustæ, lineolis costalibus nigricantibus, linea submarginali e guttis lanceolatis albo-cinereis, striga nigricante maculari reniformem desecante, macula orbiculari subochracea rotundata disco cinereo margine nigricante; posticæ albæ, opalinæ, semihyalinæ, venis apicalibus marginequæ nigricantibus.

Spodoptera acronyctoides, *Guén. Noct.* i. 154, 245.

Otaheite.

Genus 9. LAPHYGMA.

Corpus vix robustum. Proboscis breviuscula. Palpi validi, breves, ascendentes; articulus 3us minimus. Antennæ simplices, graciles, corporis dimidio non longiores. Abdomen alas posticas vix superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ anticæ sat angustæ, apud costam rectæ, apice

rotundatæ, margine exteriore mediocriter obliquo; posticæ tenues, opalinæ, semihyalinæ.

Caradrina, p., *Treit.; Boisd.; Dup.*
Laphygma, *Guén. Noct.* i. 156.
Trigonophora, *Geyer.*

Body hardly stout. Proboscis rather short. Palpi stout, short, ascending; third joint very minute. Antennæ simple, slender, about half the length of the body. Abdomen hardly extending beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Fore wings rather narrow, straight in front, rounded at the tips, moderately oblque along the exterior border; second inferior vein nearer to the first than to the third; fourth moderately remote. Hind wings delicate, pearly, semihyaline.

Europe.

1. Laphygma exigua.

Cinerascens; alæ anticæ lineis transversis undulatis subobsoletis pallidioribus et obscurioribus, annulis discalibus orbiculato et reniformi testaceis; posticæ albæ, opalinæ, semihyalinæ.

Noctua exigua, *Hübn. Samml. Eur. Schmett. Noct.* f. 362.
Telmia exigua, *Hübn. Verz. Schmett.* 228, 2286.
Caradrina exigua, *Treit. Schmett. Eur.* ii. 254; *Suppl.* x. 81. *Dup. Hist. Nat. Lép. Fr.* iii. 45, pl. 75. *Boisd. Ind. Méth.* 138, 1112. *Guén. Ann. Soc. Ent. Fr.* vi. 236. *Herr.-Schæff. Eur. Schmett.* ii. 212, 99; ii. *Noct.* pl. 66, f. 44.
Laphygma exigua, *Noct.* i. 158, 252.

South France. Italy. Dalmatia.

a—d. Europe. From M. Becker's collection.

2. Laphygma pygmæa.

Alæ fusco-subcinereæ, macula subcentrali rufa.

Caradrina pygmæa, *Ramb. Ann. Soc. Ent. Fr.* iii. 384, pl. 8, f. 2. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 321, pl. 29. *Boisd. Ind. Méth.* 138, 1113. *Guén. Ann. Soc. Ent. Fr.* vi. 236.
Laphygma pygmæa, *Guén. Noct.* i. 158, 253.
Laphygma exigua, *var.?*

Marseilles.

Apamidae

North America.

3. Laphygma frugiperda.

Mas. *Cervina; alæ anticæ pallide fuscæ, fasciis punctulatis guttisque apicalibus nigris, litura discali cervina, fascia obliqua subapicali albo-glauca; posticæ roseo-albæ, fusco apud apices marginatæ.*

Trigonophora frugiperda (Noctua genuina, Achatia communis), *Geyer, Zeitr. Samml. Exot. Schmett.* 22, 342, f. 683, 684.

Phalæna frugiperda, *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia*, ii. 191, pl. 96.

Laphygma frugiperda, *Guén. Noct.* i. 159, 254.

North and South America. Tasmania.

4. Laphygma macra.

Subcervina aut pallide fusca; alæ anticæ annulis duobus discalibus lineisque transversis undulatis subobsoletis testaceis; posticæ albæ, opalinæ, cervino marginatæ.

Laphygma macra, *Guén. Noct.* i. 157, 251.

Brazil, &c.

a. New York. Presented by E. Doubleday, Esq.
b. Florida. Presented by E. Doubleday, Esq.
c—e. Cuba. From Mr. Milne's collection.
f. ——? Presented by J. G. Children, Esq.
g. Honduras. From Mr. Miller's collection.

5. Laphygma unisignata.

Cervina; abdomen pallidum; alæ anticæ macula discali antice nigra guttaque arcuata testacea albido marginata discalibus, lineis duabus obliquis posterioribus albis lineaque transversa undulata diffusa submarginali fusca; posticæ albidæ.

Fawn-colour. Abdomen paler. Fore wings with a brown discal spot, which is bordered with black in front, and interrupted by a curved testaceous whitish-bordered dot: the latter emits two diverging lines to the interior border; an undulating diffuse brown transverse line near the exterior border. Hind wings whitish. Length of the body 3½—4 lines; of the wings 8—9 lines.

a. Florida. Presented by E. Doubleday, Esq.
b. ——?

South America.

6. Laphygma? inepta.

Fœm. *Fusco-cinerea, antennæ corporis dimidio non longiores alæ anticæ angustæ nitentes, apud marginem exteriorem anticum vix obliquæ; posticæ albæ, opalinæ, semihyalinæ.*

Female. Brownish cinereous. Antennæ about half the length of the body. Fore wings shining, narrow, hardly oblique along the fore part of the exterior border. Hind wings white, opaline, semi hyaline. Length of the body 5 lines; of the wings 12 lines.

a. Santarem. From Mr. Bates' collection.
b, c. Venezuela. From Mr. Dyson's collection.

Africa.

7. Laphygma cycloides.

Var.? *Pallide cervina; alæ anticæ fusco subconspersæ, lineis duabus submarginalibus transversis angulatis albidis, guttis marginalibus fuscis, annulis discalibus testaceis ex parte fusco marginatis; posticæ albidæ, fusco vix marginatæ.*

Laphygma cycloides, *Guén. Noct.* i. 157, 250.

Cape.

Var.? Pale fawn-colour. Fore wings very minutely speckled with brown, with two submarginal transverse angular whitish lines, the exterior one extending over the ciliæ, and with a row of brown marginal dots; discal ringlets testaceous, partly bordered with brown. Hind wings whitish, hardly bordered with pale brown. Length of the body 4½ lines; of the wings 10 lines.

a, b. South Africa. Presented by Dr. A. Smith.

8. Laphygma? caradrinoides.

Fœm. *Cinerea; alæ anticæ mediocriter latæ, lituris costalibus fasciisque angustis subundulatis pallidioribus nigro marginatis, maculis discalibus testaceis, guttis marginalibus nigricantibus; posticæ albidæ, marginibus angustis fuscescentibus.*

Cinereous. Fore wings moderately broad, slightly oblique along the exterior border, with some paler blackish bordered costal marks and narrow slightly undulating bands; discal marks testaceous, the outer one reniform and larger than the other, which is elliptical; a row of marginal blackish dots. Hind wings whitish, with narrow brownish borders. Length of the body 5 lines; of the wings 12 lines.

Port Natal. From Dr. Krauss' collection.

9. Laphygma? capicola.

Testaceo-albida; alæ anticæ fasciis variis cinereis, lineis transversis undulatis, litura discali macula exteriore guttisque marginalibus nigricantibus, ciliis fusco notatis; posticæ albæ opalinæ.

odoptera capicola, *Herr.-Schæff. Lép. Exot. Sp. Nov.* f. 131.

pe.

Country unknown.

10. Laphygma concisa.

Pallide cervina; thorax fusco varius; abdomen albidum; alæ anticæ lineis transversis indistinctis lituraque discali undulatis albidis fusco marginatis, venis exterioribus nigricantibus albido fasciatis, areolis exterioribus nigro strigatis; posticæ albidæ, opalinæ, strigis marginalibus fuscescentibus.

Pale fawn-colour. Thorax varied with brown. Abdomen hitish. Fore wings with indistinct transverse undulating whitish rown-bordered lines, and with a serpentine discal mark of the same ue; exterior veins blackish with whitish bands; a blackish streak a each exterior areolet. Hind wings whitish, pearly; tips of the eins and intermediate streaks pale brownish. Length of the body lines; of the wings 10 lines.

. ——? Presented by J. G. Children, Esq.

Genus 10. PRODENIA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, ascendentes, breviusculi; articulus 3us longi-conicus, 2i triente non brevior. Antennæ simplices, graciles, corporis dimidio fere longiores. Abdomen alas posticas triente superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, sat angustæ; anticæ testaceæ et fuscæ, apud costam rectæ, apice subangulatæ, margine exteriore subdenticulato sat obliquo.

Trigonophora, p., *Hübn. Verz. Schmett.* 217.
Neuria, p., *Herr.-Schæff.*
Hadena, p., *Boisd.*
Prodenia, *Guén. Noct.* i. 159.

Body stout. Proboscis moderately long. Palpi stout, ascending, rather short; third joint elongate-conical, about one-third of the length of the second. Antennæ simple, slender, full half the length of the body. Abdomen extending for one-third of its length

beyond the hind wings. Legs rather stout; hind tibiæ with fo long spurs. Wings rather long and narrow. Fore wings testaceo and brown or wood-colour, straight in front, slightly angular at t tips, rather oblique and slightly denticulate along the exterior bo der; first and second inferior veins contiguous at the base; thi more than twice further from the fourth than from the second.

Europe.

1. Prodenia Retina.

Cervina; thorax fusco fasciatus; alæ anticæ ex parte fuscæ, lit ris costalibus basalibus et discalibus albidis, fasciis duab (una interiore altera exteriore) glaucescentibus, vena median venis inferioribus striga obliqua discali lineaque submarginal strigis exterioribus nigris; posticæ albæ, opalinæ, fusco vi marginatæ.

Hadena littoralis, *Boisd. Faun. Ent. Mad. Bomb. et Maur. Lé* 91, 2, pl. 13, f. 8.

Neuria retina, *Feiv. Hevr.-Schæff. Eur. Schmett.* ii. 292. *Noct.* p 29, f. 145.

Prodenia Retina, *Guén. Noct.* i. 163, 259.

Crete. European Turkey. Asia Minor. Madagascar. Mauritiu

a. Madeira. Presented by Mrs. Hope.
b, c. Congo. Presented by Sir J. Richardson.
d, e. North India. Presented by Gen. Hearsay.
f. Nepaul. Presented by W. W. Saunders, Esq.
g, h. ——— ? From Mr. Milne's collection.
i, j. ——— ?

North America.

2. Prodenia Commelinæ.

Cinerascens; thorax fusco nigroque fasciatus et vittatus; alæ an ticæ disco fuscescentes, strigis basalibus discalibus et exteriori bus nigris, lineis subcostalibus, striga obliqua discali, vena mediana, macula apicali lineaque submarginali albidis, fascia obliqua abbreviata exteriore fusca; posticæ albæ, opalinæ.

Var. *Testacea; thorax fasciis arcuatis fuscis albidisque; ala anticæ disco ex parte fuscæ, strigis lanceolatis maculaque apicali testaceo-albidis; posticæ albæ, opalinæ, cervino vix marginatæ.*

Phalæna commelinæ, *Abbot & Smith, Nat. Hist. Lép. Ins. Georgia,* ii. 189, pl. 95.

Trigonophora commelinæ, *Hübn. Verz. Schmett.* 217, 2167.
Prodenia commelinæ, *Guén. Noct.* i. 162, 256.

a—c. Georgia. From Mr. Milne's collection.
d—f. ——— ? Presented by J. G. Children, Esq.
g. Jamaica. From Mr. Gosse's collection.
h. West Indies.
i. Navigators' Isles. Presented by the Entomological Club.
j. Honduras. From Mr. Dyson's collection.

3. Prodenia Ornithogalli.

Fusco-cinerea; palpi tenuissimi, fere unicolores; abdomen cinereum; alæ anticæ unicolores, macula reniformi bene determinata antice non ocuta, macula apicali subalba, linea fusca sat lata fasciam submarginalem albam dividente; posticæ albæ, venis margineque nigricantibus.

Prodenia Ornithogalli, *Guén. Noct.* i. 163, 258.

North America.

4. Prodenia eudiopta.

Thorax olivaceo-albus, lineis paullo obscurioribus; alæ anticæ basi et apud marginem exteriorem cinereæ, disco ex parte flavo-fuscescente, macula apicali lineaque submarginali albidis, macula orbiculari ochraceo marginata; posticæ albæ, subhyalinæ, venis margineque nigricantibus.

Prodenia eudiopta, *Guén. Noct.* i. 164, 261.

North America ?

5. Prodenia signifera.

Pallide cervina; thorax fascia antica nigra; alæ anticæ subferrugineæ, apud discum fuscescentes, lineis transversis undulatis albidis nigrisque, macula apicali alba, annulo orbiculari apud discum testaceo, reniformi ex parte, macula apicali lineaque transversa albis; posticæ albæ, opalinæ, marginibus pallide fuscis.

Pale fawn-colour. Thorax with a black band in front. Fore wings slightly ferruginous, more or less brownish in the disk, with undulating transverse black and whitish lines, and with a white apical spot; orbicular ringlet testaceous in the disk; reniform ringlet partly white; median vein white towards the tip; a white trans-

verse line proceeding hindward from the apical white spot. Hind wings white, pearly, pale brown on the border about the tip Length of the body 5—6 lines; of the wings 10—12 lines.

a—c. Georgia. From Mr. Abbot's collection.
d. Venezuela. From Mr. Dyson's collection.

West Indies.

6. Prodenia plagiata.

Cervina; abdomen testaceum, alæ anticæ basi strigaque obliqua exteriore cinereis, striga obliqua intermedia margineque interiore testaceis, annulis testaceo nigroque marginatis, lineis transversis strigaque basali nigris maculaque oblonga subapicali alba; posticæ albæ, opalinæ, marginibus angustis pallide fuscis.

Fawn-colour. Abdomen testaceous. Fore wings gray at the base, and with a gray oblique streak which extends from the exterior ringlet to the middle of the exterior border; a testaceous oblique streak between the ringlets extending to a testaceous space along the interior border; ringlets with testaceous black-bordered outlines; the usual black transverse lines; a black basal streak, and a white oblong subapical spot; median vein white at the tip. Hind wings white, pearly, with pale brown narrow borders. Length of the body 5 lines; of the wings 11 lines.

a. Jamaica. From Mr. Gosse's collection.

Var.? Mas. *Testacea; alæ anticæ cinereæ, fusco ex parte variæ, lineis nonnullis transversis subundulatis nigris, maculis duabus discalibus exteriore nigro varia, vena mediana plagaque apicali albis, strigis nigris lineaque alba submarginalibus, guttis marginalibus nigris; posticæ albæ, opalinæ, semihyalinæ, linea marginali fusca.*

Male. Testaceous. Fore wings cinereous, partly shaded with brown, traversed by some slightly undulating black lines; two testaceous discal marks, the outer one accompanied with black and with a forked white streak on the median vein; a white patch at the tip of the wing, emitting a white line hindward near the exterior border, which has a row of black dots, and at a little distance from the latter there are some black streaks. Hind wings white, semihyaline, opaline, with a brown line along part of the exterior border. Length of the body 6 lines; of the wings 13 lines.

Pará. In Mr. J. P. G. Smith's collection.

7. PRODENIA LATIFASCIA.

Testacea; alæ anticæ fascia nigro-cinerea fasciaque exteriore vana lineam albam submarginalem includente, vena mediana, striga brevi obliqua discali annulisque duobus discalibus albido-testaceis; posticæ albæ, opalinæ.

Testaceous. Fore wings with a blackish gray band near the base, and with a hoary exterior band, which includes a white submarginal line, the latter proceeding from a white apical spot; median vein and a short oblique discal streak whitish testaceous, the latter approximate to two discal ringlets of the same hue. Hind wings white, opaline. Length of the body 7 lines; of the wings 16 lines.

Jamaica. In Mr. Saunders' collection.

South America.

8. PRODENIA ANDROGEA.

Cervinea; alæ anticæ fuscæ, luteo albidoque figuratæ, linea transversa submarginali flava, lineolis marginalibus albidis, plaga apicali antice incisa cervina; posticæ albæ, opalinæ.

Phalæna-Noctua Androgea, *Cram. Pap. Exot.* iv. 42, pl. 310, f. D.
Prodenia Androgea, *Guén. Noct.* i. 161, 255.

Surinam.

9. PRODENIA? PHYTOLACCA.

Ferruginea; caput et thorax testaceo univittata; thorax strigis quatuor obliquis lateribus albidis; abdomen testaceum, vitta fasciisque cinereis; alæ anticæ ex parte pallidiores, macularum marginibus fasciisque obliquis cinereis; posticæ nigro-cinereæ, basi testaceæ.

Phalæna-Noctua Phytolacca, *Anon. Ins. Surin.* i. 81, pl. 40.

Surinam.

Mauritius.

10. PRODENIA TESTACEOIDES.

Fusca; thorax lineolis transversis albidis; abdomen testaceum; alæ anticæ apud margines pallidiores, nigro strigatæ, annulis discalibus lineisque transversis albidis nigro marginatis, vena mediana, fascia submarginali maculaque apicali albidis; posticæ albæ, opalinæ, fusco vix marginatæ.

Prodenia testaceoides, *Guén. Noct.* i. 165, 262.

Mauritius. Hindostan.

a. Ceylon. Presented by R. Templeton, Esq.

Asia.

11. Prodenia ciligera.

Pallide cinerascens; thorax fasciis fuscis nigrisque lineisque duabus nigris; alæ anticæ fuscæ nigro-fusco roseoque variæ, lineolis nigris, venis ex parte, plaga obliqua lituraque furcata discalibus albidis; posticæ albæ, fusco marginatæ.

Prodenia ciligera, *Guén. Noct.* i. 164, 260.

Java.

12. Prodenia infecta.

Testacea; alæ anticæ lineis transversis indistinctis fuscis, macula reniformi apud discum nigro-fusca, macula submarginali fusca, guttis marginalibus nigro-fuscis; posticæ albæ, opalinæ, marginibus angustis pallide fuscis.

Testaceous. Fore wings with indistinct transverse brown lines; disk of the exterior ringlet dark brown; a brown spot near the middle of the exterior border, along which there is a row of dark brown dots. Hind wings white, pearly, with narrow pale brown borders. Length of the body 4½ lines; of the wings 11 lines.

a. North India. From Mr. James' collection.

13. Prodenia subterminalis.

Cervina; thorax antice obscurior; abdomen pallidium; alæ anticæ lineis transversis undulatis vittaque extus dilatata fuscis, fascia obliqua albida, maculis duabus submarginalibus lineaque intermedia albis, annulis testaceis fusco marginatis, reniformi apud discum fusco, guttis marginalibus nigro-fuscis; posticæ albæ, opalinæ, marginibus pallide fuscis.

Fawn-colour. Thorax darker in front. Abdomen paler. Fore wings with transverse undulating brown lines, with a slight brown stripe, which is dilated exteriorly, with a whitish oblique band, which begins between the ringlets, with a white subapical spot, which emits a white line hindward to another whitish spot by the interior angle; ringlets testaceous, with brown borders, the reni-

form one with a brown disk; a row of dark brown marginal dots. Hind wings white, pearly, with pale brown borders. Length of the body 5½ lines; of the wings 12 lines.

a. Punjaub. Presented by Gen. Hearsay.
b. North India. From Mr. James' collection.

14. Prodenia insignata.

Pallide testacea; thorax cervino varius; alæ anticæ pallide cervinæ, lineis variis transversis, lituris discalibus fasciaque exteriore testaceo-albis, ex parte fusco marginatis, lineis marginalibus fuscis strigaque obliqua apicali alba; posticæ albæ, opalinæ, fusco vix marginatæ.

Pale testaceous. Thorax varied with fawn-colour. Fore wings pale fawn-colour, with various testaceous white transverse lines, which are partly bordered with brown; with discal marks, and with an exterior band of the same hue, the band interrupting a row of marginal brown lines, and shortened in front by an oblique apical white streak. Hind wings white, pearly, hardly bordered with brown. Length of the body 4 lines; of the wings 10 lines.

a. North India. From Mr. James' collection.

15. Prodenia glaucistriga.

Testacea; thorax fasciis nonnullis anticis arcuatis fuscescentibus; alæ anticæ fuscescentes et strigis nigricantibus albidisque variæ, fasciis latis duabus glaucis unaque abbreviata cervina, vitta brevi obliqua albida testaceo strigata, vena mediana albida; posticæ albæ, opalinæ, semihyalinæ.

Testaceous. Thorax with some slight brownish curved bands in front. Fore wings brownish, and with blackish and whitish streaks here and there, the rest of the wing being occupied by three broad bands; the first and the third glaucous; the middle one fawn-colour, abbreviated in front, where it is bounded by a short oblique whitish stripe, the latter containing testaceous streaks; median vein and part of the inferior veins whitish. Hind wings white, opaline, semihyaline. Length of the body 6—8 lines; of the wings 14—16 lines.

a. North India. Presented by the Entomological Club.
b. North India. From Mr. James' collection.
c. North India. From Mr. Stevens' collection.
d. Canara. Presented by S. N. Ward, Esq.

Australia.

16. Prodenia Tasmanica.

Alæ anticæ opalino-cinereæ, venis maculisque discalibus flavo-albis roseis, maculis lineisque marginalibus cinereo-albis vix roseis, macula fusca submarginali longa e strigis lanceolatis plurimis divisa et producta; posticæ albæ, margine nigricante.

Prodenia Tasmanica, *Guén. Noct.* i. 163, 277.

Tasmania.

Genus 11. CALOGRAMMA.

Corpus robustum. Proboscis brevis. Palpi breves, porrecti, caput non superantes; articulus 3us conicus, 2i quadrante non longior. Antennæ corporis dimidio non longiores. Thorax pilosissimus. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore sat obliquo. *Mas.*—Antennæ subserratæ.

Polia, p., *Boisd.*
Calogramma, *Guén. Noct.* i. 165.

Body stout. Proboscis short. Palpi short, porrect, not extending beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ about half the length of the body. Thorax thickly clothed. Abdomen extending for one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, slightly rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins nearly contiguous at the base; fourth moderately remote. *Male.*—Antennæ minutely serrated.

1. Calogramma festiva.

Testacea; thorax rufo varius; alæ anticæ albido-testaceæ nigro-rufoque variæ; posticæ albæ, opalinæ.

Noctua festiva, *Donov. Epit. Ins. New Holl.*

Polia picta, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 241. *Guén. Voy. de la Coquille*, ii. 285, pl. 19, f. 7. (Noctua picta.)
Calogramma picta, *Guén. Noct.* i. 166, 263.

New Holland.

a, *b*. New South Wales. From Mr. Wood's collection.
c. Ceylon. Presented by R. Templeton, Esq.
d. ——? From Mr. Milne's collection.
e. ——?

Genus 12. NEURIA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, subascendentes; articulus 3us cylindricus, 2i quadrante brevior. Antennæ corporis dimidio multo longiores. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ, anticæ apud costam subrectæ, apice angulatæ, margine exteriore subobliquo vix convexo. *Mas.*—Antennæ subcrenulatæ.

Hadena, p., *Treit.; Meig.; Steph. Ill. Brit. Ent. Haust.*
Neuria, *Guén. Ind.* 241; *Noct.* i. 166. *Dup.; Steph. Cat. Brit. Lep.*

Body stout. Proboscis moderately long. Palpi stout, pilose, slightly ascending; third joint cylindrical, not one-fourth of the length of the second. Antennæ much more than half the length of the body. Abdomen extending for about one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings almost straight in front, angular at the tips, slightly oblique and hardly convex along the exterior border; first, second and third inferior veins contiguous at the base; fourth remote. *Male.*—Antennæ minutely crenulated.

1. Neuria Saponariæ.

Fuscescens; thorax lineis transversis albidis; abdomen cinereo-albidum; alæ anticæ fuscæ, venis ex maxima parte, annulis duobus oblongis transversis discalibus (exteriore apud medium coarctato) lineisque transversis undulatis sordide albidis nigricante marginatis, annulis discalibus, strigis lanceolatis exterioribus guttisque marginalibus nigris; posticæ cinereo-albidæ, fusco late marginatæ.

——, *Engr. Pap. d'Eur.* 462, a—c. *Deg. Ins.* ii. 233, pl. 7, f. 27.

Noctua Saponariæ, *Esp. Schmett.* iv. pl. 198, f. 3, 4. *Bork. Eur. Schmett.* iv. 270, 152. *Frey. N. Beitr.* iii. pl. 231.
Neuria Saponariæ, *Dup. Hist. Nat. Lép. Fr.* vi. 272, pl. 90, f. 2. *Guén. Noct.* i. 167, 264. *Steph. Cat. Brit. Lep.* 96.
Noctua Calcatrippa, *View. Schmett.* 71, 111.
Noctua typica, *Hübn. Samml. Eur. Schmett. Noct.* pl. 12, f. 58.
Noctua marginosa, *Haw. Lep. Brit.* 101.
Noctua (Hadena) Saponariæ, *Meig. Syst. Besch.* iii. 105, 42, pl. 97, f. 3.
Hadena Saponariæ, *Hübn. Verz. Schmett.* 216, 2153. *Treit. Schmett. Eur.* v. 1, 303, 1. *Steph. Ill. Brit. Ent. Haust.* ii. 189. *Boisd. Ind. Méth.* 119, 932. *Westw. & H. Brit. Moths*, i. 168, pl. 34, f. 11. *Herr.-Schæff. Eur. Schmett.* ii. 293, 345.

a—l. England. From Mr. Stephens' collection.
m, n. England.
o—q. Europe. From M. Becker's collection.

2. Neuria dentigera.

Cervino-fusca; alæ anticæ disco margineque exteriore ex parte nigricantibus, fasciis tribus annulis discalibus lituraque posteriore albidis; posticæ cinereæ fascia pallidiore.

Hadena dentigera, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837, 1; *Faun. Volg-Ural.* 218.
Noctua Dianthi? *Hübn. Samml. Eur. Schmett.* f. 587. *God. Hist. Nat. Lép. Fr.* v. pl. 65, f. 6.
Hadena Dianthi? *Hübn. Verz. Schmett.* 216, 2156.
Noctua (Agrotis) Dianthi? *Meig. Syst. Besch.* iii. 85, 6, pl. 95, f. 5.
Neuria dentigera, *Guén. Noct.* i. 167, 265.

Ural Region. Shores of the Caspian.

Genus 13. CHIRIPHA.

Mas. Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, oblique ascendentes; articulus 3us conicus, minimus. Antennæ serratæ, corporis dimidio paullo longiores. Abdomen alas posticas fere dimidio superans, apice fasciculatum. Pedes longiusculi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore recto perobliquo.

Male. Body stout. Proboscis moderately long. Palpi stout,

pilose, obliquely ascending; third joint conical, very minute. Antennæ a little more than half the length of the body, serrated. Abdomen extending for almost half its length beyond the hind wings, tufted at the tip. Legs rather long; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, almost acutely angular at the tips, straight and very oblique along the exterior border; first, second and third inferior veins approximate; fourth moderately remote.

1. Chiripha involuta.

Mas. *Fusca; caput fasciis albidis; thorax fasciis anticis vittisque posticis albidis; abdomen albidum; alæ anticæ lituris lanceolatis nigris albo marginatis aut lineatis, linea recta albida costali lineaque marginali alba; posticæ albidæ, marginibus latis fuscescentibus.*

Male. Brown. Head with whitish bands. Thorax with whitish bands in front, and with whitish stripes on each side. Abdomen whitish. Fore wings with lanceolate black marks, which are bordered or intersected by whitish lines; a straight whitish subcostal line, and a white marginal line; ciliæ with alternate brownish and whitish lines. Hind wings whitish, with broad pale brown borders. Wings beneath whitish, shaded in front with pale brown; discal spot and an exterior oblique band dark brown. Length of the body 10 lines; of the wings 18 lines.

Hindostan. In Mr. Saunders' collection.

Genus 14. DARGIDA.

Mas. Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, ascendentes; articulus 3us minimus. Antennæ subciliatæ, corporis dimidio longiores. Abdomen alas posticas triente superans, basi cristatum. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ mediocriter latæ, anticæ apud marginem exteriorem denticulatæ sat obliquæ vix convexæ.

Male. Body stout. Proboscis moderately long. Palpi stout, pilose, ascending; third joint extremely minute. Antennæ very minutely ciliated, more than half the length of the body. Abdomen extending for one-third of its length beyond the hind wings, crested towards the base. Legs stout; hind tibiæ with four moderately long spurs. Wings moderately broad, denticulate, rather oblique, and hardly convex along the exterior border; first, second and third inferior veins approximate; fourth moderately remote.

1. Dargida grammivora.

Mas. *Fusca, purpureo glaucoque subtincta; thoraæ fasciis pallidioribus et obscurioribus anticis, vittis tribus posticis albidis; abdomen cinereum; alæ anticæ lituris, vitta discali fascia obliqua exteriore guttisque submarginalibus flavo-albis; posticæ sordide albidæ, gutta discali margineque late fuscis.*

——— grammivora, *Morritz, MSS.*

Male. Brown, with slight purplish and glaucous reflections. Thorax in front with alternate paler and darker curved bands; hind part with three whitish stripes. Abdomen cinereous. Fore wings with a discal stripe, and an oblique exterior band yellowish white; some marks on each side of the stripe, and a row of dots beyond the band of the same hue; the stripe forked towards its tip; ciliæ with a yellow scalloped transverse line, and intersected with white opposite the veins. Hind wings dingy whitish, with a brown discal dot and a broad brown border. Length of the body 5—7 lines; of the wings 12—16 lines.

Rio Grande.

a—c. Venezuela. From Mr. Dyson's collection.

Genus 15. FELTIA.

Mas. Corpus sat gracile. Proboscis mediocriter longa. Palpi porrecti, pilosi, sat graciles, caput superantes; articulus 3us cylindricus, 2i triente brevior. Antennæ serratæ, corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore vix obliquo.

Male. Body rather slender. Proboscis moderately long. Palpi porrect, pilose, rather slender, extending somewhat beyond the head; third joint cylindrical, full one-fourth of the length of the second. Antennæ serrated, more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs rather long and slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, hardly oblique along the exterior border; first, second and third inferior veins approximate; fourth moderately remote.

1. Feltia ducens.

Mas. *Cinerea; thorax fasciis anticis nigricantibus; alæ anticæ apud discum fuscæ nigro strigatæ, macula discali testacea, margine pallidiore nigroque conspersa, linea albida interiore furcata, fascia exteriore pallida, lunulis marginalibus nigris, venis ex parte albis; posticæ sordide albidæ, marginibus latis fuscescentibus.*

Male. Cinereous. Thorax with blackish bands in front. Fore wings mostly brown, and streaked with black in the disk; discal mark testaceous, with a paler border, and speckled with black; an interior irregular whitish line forked hindward near the base; a pale outer band dividing the brown part in the disk from that along the exterior border, where there is a row of black lunules; veins partly white. Hind wings dingy whitish, with broad brownish borders. Length of the body 6 lines; of the wings 14 lines.

a. Orilla. West Canada. From Mr. Bush's collection.

Subfam. 3. EPISEMIDES.

Episemides, *Guén. Noct.* i. 168.

A. Palpi ascendentes. - - - 1. Heliophobus, *Boisd.*
B. Palpi porrecti.
A. Antennarum articulus 2us 3o quadruplo longior.
a. Abdomen alas posticas triente superans. 2. Episema, *Ochs.*
b. Abdomen alas posticas perpaullo superans. 3. Charæas, *Steph.*
B. Antennarum articulus 3us 2i triente longior. 4. Pachetra, *Guén.*

Genus 1. HELIOPHOBUS.

Corpus robustum, pilosissimum. Proboscis mediocriter longa. Palpi validi, pilosi, ascendentes; articulus 3us longi-conicus, 2i quadrante non longior. Antennæ corporis dimidio non longiores. Abdomen alas posticas triente superans. Pedes pilosissimi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ signatæ, venis pallidis, apud costam rectæ, apice subangulatæ, margine exteriore vix obliquo. *Mas.*—Antennæ late pectinatæ. Abdomen apice fasciculatum.

Neuronia, *Hübn. Verz. Schmett.* 215.
Heliophobus, *Boisd. Ind. Méth.; Steph.; Duponch.; Guénée, Ann Soc. Ent. Fr.* vi. 350; *Noct.* i. 168.
Episema. p., *Boisd.*
Episema et Hadena, *Treits.*
Heliophobus et Cladocera, *Ramb.*
Neuria, p., et Orthosia, p., *Herr.-Schæff.*

Body stout, very pilose. Proboscis moderately long. Palp stout, pilose, ascending; third joint elongate-conical, about one fourth of the length of the second. Antennæ about half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. Legs very pilose; hind tibiæ with four long spurs. Wings moderately broad. Fore wings with various markings, and with pale lines on the veins, straight in front, slightly angular at the tips, very slightly oblique along the exterior border; second inferior vein a little nearer to the third than to the first; fourth moderately remote. *Male.*—Antennæ deeply pectinated. Abdomen tufted at the tip.

Group 1. Type.

1. Heliophobus popularis.

Fuscus; thorax albido nigroque lineatus; abdomen albidum, postice obscurius fusco fasciatum; alæ anticæ albido venosæ lineolis marginalibus nigris fuscisque annulis discalibus testaceis nigro marginatis, lineis transversis duplicatis interioribus denticulisque exterioribus nigris, his testaceo fasciatis; posticæ sordide albidæ, margine lato cinereo.

———, *Engr. Pap. d'Eur.* 244, a—c. *Fabr. Syst. Ent.* 577, 71.
Phalæna-Bombyx popularis *Gmel. ed. Syst. Nat.* i. 5, 2440, 576.
Bombyx popularis, *Fabr. Mant. Ins.* ii. 133, 209; *Ent. Syst.* iii. 1, 484, 240. *Oliv. Enc. Méth.* v. 101, 264. *Klum, Brit. Ins. Ges.* ii. pl. 2. *Haw. Lep. Brit.* 63.
Noctua graminis, *Wien. Verz.* 82, 3. *Hübn. Samml. Eur. Schmett. Noct.* 59.
Neuronia popularis, *Hübn. Verz. Schmett.* 215, 2148.
Hadena Popularis, *Treit. Schmett. Eur.* v. 1, 316, 5.
Bombyx Lolii, *Esp. Schmett.* iv. pl. 198, f. 3, 4. *Bork. Eur. Schmett.* iv. 398, 161.
Noctua (Hadena) popularis, *Meig. Handb.* 159, 31; *Syst. Besch.* iii. 105, 41, pl. 97, f. 2.

Heliophobus popularis, *Boisd. Ind. Méth.* 112, 864. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 90, f. 5. *Steph. Ill. Brit. Ent. Haust.* ii. 189. *Guén. Noct.* i. 170, 266.
Neuria popularis, *Herr.-Schæff. Eur. Schmett.* ii. 291, 340.

e—k. England. From Mr. Stephens' collection.
i—l. England.
m—o. Europe. From M. Becker's collection.

2. Heliophobus vittalba.

Fusco-testacea; alæ anticæ signaturis omnibus et margine anteriore roseo-albis, stigmate 3o fundo concolore; posticæ albidæ, fascia submarginali obscuriore.

Hadena vittalba, *Treit. Schmett. Eur. Suppl.* x. 40.
Noctua vittalba, *Frey. Neu. Beit. Schmett.* ii. 48, pl. 124.
Heliophobus vittalba, *Boisd. Icon. Lep. d'Eur.* pl. 73; *Ind. Méth.* 112, 863. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 170, 267.
Neuria vittalba, *Herr.-Schæff. Eur. Schmett.* ii. 291, 341; ii. *Noct.* pl. 7, f. 34—36.

Sicily.

Group 2.

Fœm. Alæ brevissimæ.

Female with the rudiments of wings.

3. Heliophobus hirta.

Fuscescens; alæ anticæ lineis duabus transversis obliquis, annulis discalibus strigaque posteriore albidis nigro marginatis, venis albidis, strigis exterioribus nigris; posticæ cinereæ, ciliis albidis.

Noctua hirta, *Hübn. Samml. Eur. Schmett.* 591.
Episema hirta, *Hübn. Verz. Schmett.* 224, 2250.
Heliophobus hirta, *Boisd. Icon. Lép. d'Eur.* pl. 74; *Ind. Méth.* 112, 862. *Eversm. Bull. Soc. Imp. Nat. Mosc.* 186. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 176, pl. 16, f. 4. *Guenée, Ann. Soc. Ent. Fr. 2me Sér.* viii. *Bull.* viii.; *Noct.* i. 171, 268.
Neuria hirta, *Herr.-Schæff. Eur. Schmett.* ii. 290, 339.

South Russia.

a. Odessa. Presented by Dr. Dowler.
b. Europe. From M. Becker's collection.

Group 3.

Palpi articulo 3o brevi. Tibiæ anticæ spinosæ.

Cladocera, p., *Ramb.*

Third joint of the palpi short. Fore tibiæ spinose.

4. Heliophobus optabilis.

Albida; alæ anticæ disco cinerascente, strigis submarginalibus nigris, annulis discalibus vittaque basali furcata testaceis albido nigroque marginatæ. Fœm. — *Alæ posticæ cineras marginatæ.*

Heliophobus optabilis, *Boisd. Icon. Lép. d'Eur.* pl. 74; *Ind. Méth.* 112, 859. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 170, pl. 16. *Herr.-Schæff. Eur. Schmett.* ii. *Noct.* pl. 7, f. 31—33. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 171, 269.

South France. Spain. South Russia.

Group 4.

Palpi articulo 3o longiusculo. Tibiæ anticæ spinosæ.

Cladocera, p., *Ramb.*

Third joint of the palpi rather long. Fore tibiæ spinose.

5. Heliophobus Bœtica.

Albida; thorax testaceo nigroque fasciatus et vittatus; alæ anticæ testaceo variæ, annulis duobus discalibus, lituris posterioribus, strigis exterioribus guttisque submarginalibus nigris.

Heliophobus Bœtica, *Boisd. Icon. Lép. d'Eur.* pl. 74, f. 6; *Ind. Méth.* 112, 860. *Ramb. Faune Andal. Dup. Hist. Nat. Lép. Fr.* iii. 215, pl. 20. *Herr.-Schæff. Eur. Schmett.* ii. *Noct.* pl. 5, f. 23. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 171, 269.

South Spain.

Group 5.

Episemæ affinis.

Allied to *Episema*.

6. Heliophobus? Odites.

Fusca; thorax flavo varius; alæ anticæ flavo subreticulatæ, strigis exterioribus guttisque marginalibus nigris, linea submarginali flava; posticæ subtestaceæ, fascia margineque cinereis.

Noctua Odites, *Hübn. Samml. Eur. Schmett. Noct.* 694.
Heliophobus Odites, *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 172, 272.
Episema Odites, *Boisd. Ind. Méth.* 139, 1118.

This species hardly belongs to the genus *Heliophobus*.

South Russia.

7. Heliophobus hispida.

Cinerea; abdomen basi canescens; alæ anticæ lituris basalibus et costalibus, fasciis tribus, ocello discali, strigis lanceolatis exterioribus venisque canescentibus nigro ex parte marginatis; posticæ cinerascentes.

Noctua hispida, *Hübn. Samml. Eur. Schmett. Noct.* pl. 166, f. 784—786.
Hadena hispida, *Treit. Schmett. Eur. Suppl.* x. 39.
Heliophobus hispida, *Boisd. Icon. Lép d'Eur.* pl. 72, f. 6, 7. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 172, 273.
Heliophobus hirta, *Dup. Hist. Nat. Lép. Fr.* iii. 275, pl. 90.
Heliophobus hispidus, *Steph. Cat. Brit. Lep.* 97.
Episema hispida, *Boisd. Ind. Méth.* 139, 1119.
Episema pilosa, *Boisd. Ind. Méth.* ed. 1.
Orthosia hispida, *Herr.-Schæff. Eur. Schmett.* ii. 195, 41.

a, b. England. From Mr. Stephens' collection.
c, d. Isle of Portland. From Mr. Stevens' collection.
e. Europe. From M. Becker's collection.

North America.

8. Heliophobus fimbriaris.

Cano-cervina; abdomen pallide testaceum; alæ anticæ gutta lunulisque discalibus testaceis nigro marginatis, lineis duabus transversis (una interiore, altera exteriore guttulari) albidis fusco marginatis, lunulis marginalibus nigris; posticæ canæ, fascia submarginali fuscescente.

Heliophobus fimbriaris, *Guén. Noct.* i. 172, 271.

a. United States. Presented by E. Doubleday, Esq.

Genus 2. EPISEMA.

Corpus validum, pilosum. Proboscis brevis. Palpi porrecti, pilosi; articulus 3us subcylindricus, 2i quadrante non longior. Antennæ corporis dimidio longiores. Abdomen alas posticas triente superans. Pedes pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ lituris venisque pallidis, apud costam rectæ, apice rotundatæ, margine exteriore vix obliquo. *Mas.*—Antennæ late pectinatæ.

Episema, *Ochs.; Treit.; Boisd.; Guén.; Dup.; Meig.*

Body stout, pilose. Proboscis short. Palpi porrect, pilose; third joint nearly cylindrical, about one-fourth of the length of the second. Antennæ more than half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. Legs pilose; hind tibiæ with four long spurs. Wings moderately broad. Fore wings with pale lines on the veins and other pale marks, straight in front, rounded at the tips, very slightly oblique along the exterior border; first, second and third inferior veins approximate; fourth rather remote. *Male.*—Antennæ deeply pectinated.

1. Episema hispana.

Alæ anticæ supra albido vel cinereo-subrufescentes, maculis obscurioribus, lineis duabus transversis, interna in medio angulosa; antennæ maris *valde et ad apices pectinatæ.*

Episema hispana, *Rambur, Ann. Soc. Ent. Fr. 2me Sér.* vi. 66; *Rev. Zool.* 1847, 238, 3. *Guén. Noct.* i. 173, 274. *Meig. Syst. Besch.* iii. 60, 3, pl. 89, f. 10.

Episema trimacula, *Duponch. Hist. Nat. Lép.* vi. 193, pl. 85, f. 3.

Spain. Algeria.

a. Europe. From M. Becker's collection.

2. EPISEMA TRIMACULA.

Cana, nigro conspersa; abdomen albidum; alæ anticæ fasciis tribus abbreviatis nigricantibus albo marginatis, 1a arcuata, 2a brevissima maculari, 3a undulata, ciliis cinereis; posticæ albidæ.

Bombyx trimacula, *Wien. Verz. Bomb.* M. 4.
Noctua trimacula, *Hübn. Samml. Exot. Schmett.* 141, 2.
Episema trimacula, *Hübn. Verz. Schmett.* 224, 2251. *Treit. Schmett. Eur.* i. 117. *Boisd. Icon. Lép. d'Eur.* pl. 72, f. 1; *Ind. Méth.* 139, 1121. *Herr.-Schæff Eur. Schmett.* ii. *Noct.* pl. 22, f. 106. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 174, 275.

Var. *Statura* E. trimaculæ *et illi subaffinis; alæ anticæ cinereo-fuscæ, maculis ordinariis unaque subjacente venosis coadunatis albido-rufescentibus, macula basali albido-rufescente nigro marginata, fascia externa albicante: posticæ albæ.*

Episema hispana, *Boisd. Icon.* pl. 92, f. 4, 5. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 68, pl. 16.
Episema trimacula, *var.*, *Treit. Guén. Herr.-Schæff. Eur. Schmett.* ii. *Noct.* pl. 22, f. 105.
Orthosia trimacula, *Herr.-Schæff. Eur. Schmett.* ii. 195, 40.

a, b. Europe. From M. Becker's collection.

Var. *Cinereo-cana; thorax antice cano fuscoque fasciatus; alæ anticæ albo venosæ, fasciis duabus marginatis (una basali, altera exteriore) albidis, disco nigro-fusco maculis duabus connexis fuscescentibus, linea undulata marginali nigra; posticæ cinereæ.*

——— ———, *Engr. Pap. d'Eur.* 142, a, d, bis.
Noctua tersa, *Wien. Verz.* 8, 9. *Hübn. Samml. Eur. Schmett. Bomb.* 140.
Episema tersa, *Hübn. Verz. Schmett.* 224, 2249. *Treit. Schmett. Eur.* i. 118. *Boisd. Icon. Lép. d'Eur.* pl. 72, f. 2, 3. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 164, pl. 15.
Noctua glaucina, *Esp. Schmett.* pl. 81, f. 5. *Frey. Ent. Zeit. Stett.* ii. 92.

c. Europe. From M. Becker's collection.

Var. *Alæ anticæ omnino helveolæ punctis pallidioribus.*

Episema unicolor, *Duponch. Ann. Soc. Ent. Fr.* iv. 193, pl. 41, f. 1; *Hist. Nat. Lép. Fr. Suppl.* 166, pl. 45

France. Switzerland. Austria. Hungary.

South America.

3. Episema? Scotica.

Fœm. *Cinerea; abdomen fuscum; alæ anticæ strigis discalibus fasciisque duabus subapicalibus flavis, punctis duobus discalibus nigricantibus; posticæ antice canæ.*

Episema Scotica (Noctua genuina, Graphiphora perspicua), *Hübn. Samml. Exot. Schmett.* ii. 28, 180, f. 359, 360.

Buenos Ayres.

Africa.

4. Episema? Pierreti.

Alæ anticæ fusco-cinereæ lineis tribus transversis obsoletis rufescentibus; posticæ albidæ.

Episema? Pierreti, *Bugnion, Ann. Soc. Ent. Fr.* vi. 441, pl. 16, f. 3.

Alexandria, Egypt.

Genus 3. CHARÆAS.

Corpus pilosum, vix robustum. Proboscis brevis. Palpi porrecti, pilosi, caput perpaullo superantes; articulus 3us longi-conicus, 2i quadrante non longior. Antennæ corporis dimidio paullo longiores. Abdomen alas posticas perpaullo superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ vix latæ; anticæ obscuræ venis liturisque pallidis, apud costam rectæ, apice vix angulatæ, margine exteriore subobliquo. *Mas.*—Antennæ subpectinatæ.

Lycophotia, p., *Hübn. Verz. Schmett.* 215.
Heliophobus, p., *Boisd.*
Charæus, p., *Steph.; Dup.; Guén.*
Cerapteryx, *Curt. Brit. Ent.* x. 451. *Steph. Cat. Brit. Lep.*

Body pilose, hardly stout. Proboscis short. Palpi porrect, pilose, extending very little beyond the head; third joint elongate, conical, about one-fourth of the length of the second. Antennæ a little more than half the length of the body. Abdomen extending a very beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings hardly broad. Fore wings dark, with pale veins and markings, straight in front, hardly angular at the tips, slightly oblique along the exterior border; first, second and third inferior veins approximate; fourth remote. *Male.*—Antennæ slightly pectinated.

1. Charæas graminis.

Fusca; abdomen cinerascens, apice fulvescens; alæ anticæ venis, macula annuloque discalibus vittaque diffusa exteriore albidis; posticæ basim versus albicantes, ciliis albidis.

——— ———, *Raii, Ins.* 128, 4. *Frisch, Ins.* 10, pl. 21. *Harr. Engl. Ins.* pl. 5, f. 7. *Deg. Ins.* ii. 340, 5. *Engr. Pap. d'Eur.* pl. 395, a—d.

Phalæna-Bombyx graminis, *Linn. Syst. Nat.* i. 506, 73; *Faun. Suec.* 1140. *Act. Holm.* 40, pl. 2. *Gmel. ed. Syst. Nat.* i. 5, 2440, 73.

Bombyx graminis, *Fabr. Sp. Ins.* ii. 204, 148; *Mant. Ins.* ii. 133, 208; *Ent. Syst.* iii. 239. *Wien. Verz.* 82, 3. *Esp. Schmett. Eur.* pl. 68, f. 1. *Bork. Eur. Schmett.* 171. *Haw. Lep. Brit.* 117, 186. *Oliv. Enc. Méth.* v. 101, 263. *Donov. Hist. Nat. Brit. Ins.* pl. 458. *Hübn. Eur. Schmett. Bomb.* f. 480, 481.

Bombyx tricuspis, *Esp. Schmett. Eur.* iii. 348, pl. 68, f. 2, 3.

Lycophotia graminis, *Hübn. Verz. Schmett.* 215, 2146.

Episema graminis, *Treit. Schmett. Eur.* i. 120.

Xylina graminis, *Meig. Syst. Besch.* iii. 186, 12, pl. 110, f. 6; *Handb.* 154, 16.

Charæas graminis, *Steph. Il. Brit. Ent. Haust.* ii. 111. *Dup. Hist. Nat. Lép. Fr.* iii. 195, pl. 85. *Guén. Noct.* i. 176, 276.

Heliophobus graminis, *Boisd. Ind. Méth.* 112, 861; *Icon.* pl. 74.

Cerapteryx graminis, *Curt. Brit. Ent.* x. 451. *Steph. Cat. Brit. Lep.* 62.

Cerapteryx hibernica, *Curt. Brit. Ent.* x. 451.

Episema albineura. *Boisd. Icon.* pl. 74, f. 4.

e—j. England. From Mr. Stephens' collection.
k—n. England.
o, p. Scotland. From Mr. Foxcroft's collection.
q. Europe. From M. Becker's collection.

North America.

2. Charæas? detersa.

Mas et fœm. *Pallide cervina; thorax fascia fuscescente; abdomen albido-testaceum; tarsi fusco fasciati; alæ anticæ pallide fuscæ punctis obscurioribus, costa venis, maculis discalibus fasciaque exteriore albidis, lunulis marginalibus obscure fuscis; posticæ pallidissime cinereæ marginibus fuscescentibus; ciliis albidis.*

Male and female. Pale fawn-colour. Third joint of the palpi rather longer than in *C. graminis*. Thorax with a brownish band. Abdomen whitish testaceous. Tarsi with brown bands. Fore wings pale brown, slightly speckled with darker brown; the costa, the veins, the two discal spots, and an exterior band whitish; discal spots with dark borders, the orbicular one rather oblong, the other somewhat reniform; exterior border with dark brown lunules. Hind wings very pale cinereous, with brownish borders and whitish ciliæ. Length of the body 6 lines; of the wings 14 lines.

a—d. Nova Scotia. From Lieut. Redman's collection.

South America.

3. Charæas? Sannio.

Cervina; alæ anticæ testaceæ, basi fuscæ venis, macula anteriore strigaque posteriore testaceis, strigis submarginalibus fasciaque marginali fuscis; posticæ ciliis testaceis.

Phalæna Sannio, *Cram. Pap. Exot.* iv. pl. 399, f. D.
Lycophotia Sannio, *Hübn. Verz. Schmett.* 215, 2147.

Surinam.

Genus 4. PACHETRA.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, pilosi, caput paullo superantes; articulus 3us longi-conicus, 2i triente longior. Antennæ corporis dimidio longiores. Abdomen alas posticas perpaullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore denticulato et mediocriter obliquo. *Mas.*—Antennæ subserratæ.

Mamestra, p., *Hübn. Verz. Schmett.* 214.
Hadena, p., *Treit.*
Luperina, p., *Boisd.*
Polia, p., *Herr.-Schæff.*
Heliophobus, p., *Steph. Ill. Brit. Ent. Haust.*
[illegible], *Guén. Ind.* 241; *Noct.* i. 177. *Steph. Cat. Brit. Lep.*

Body stout. Proboscis moderately long. Palpi porrect, pilose, extending a little beyond the head; third joint elongate-conical, more than one-third of the length of the second. Antennæ more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, denticulated and moderately oblique along the exterior border; second inferior vein about equally distant from the first and from the third; fourth moderately remote from the third. *Male.*—Antennæ very minutely serrated.

1. Pachetra leucophæa.

Canescens; thorax fusco fasciatus; alæ ciliis albis fusco notatis; anticæ fusco variæ, annulis duobus discalibus albis, litura posteriore, lineis duabus undulatis transversis strigisque exterioribus nigris; posticæ pallide cinerascentes.

——— ———, *Engr. Pap. d'Eur.* 245. *Roës. Ins.* iii. pl. 68, f. 5.
Noctua leucophæa, *Wien. Verz.* 82, 5. *Hübn. Samml. Eur. Schmett. Noct.* pl. 27, f. 80, 817. *Bork. Eur. Schmett.* iv. 408, 164. *Frey. Neu. Beit. Schmett.* iv. pl. 382: *Ent. Zeit. Stett.* ii. 94.
Bombyx fulminea, *Fabr. Sp. Ins.* ii. 205, 149; *Mant. Ins.* ii. 133, 210; *Ent. Syst.* iii. 1, 484, 241. *Oliv. Enc. Méth.* v. 101, 265.
Phalæna-Bombyx fulminea, *Gmel. ed. Syst. Nat.* i. 5, 2440, 577.
Bombyx vestigialis, *Esp. Schmett.* iii. pl. 53, f. 4, 8.
Bombyx ravida, *Esp. Schmett.* iv. pl. 145, f. 1.
Noctua Hadena leucophæa, *Meig. Handb.* 160, 32; *Syst. Besch.* iii. 106, 43, pl. 100, f. 1.
Hadena leucophæa, *Treit. Schmett. Eur.* v. 319, 6.
Heliophobus leucophæa, *Steph. Ill. Brit. Haust.* ii. 190, pl. 24.
Pachetra leucophæa, *Dup. Hist. Nat. Lép. Fr.* iii. 282, pl. 90. *Guén. Noct.* i. 177, 277. *Steph. Cat. Brit. Lep.* 97.
Luperina leucophæa, *Boisd. Ind. Meth.* 113, 865.
Mamestra leucophæa, *Hübn. Verz. Schmett.* 214, 2138.
Polia leucophæa, *Herr.-Schæff. Eur. Schmett.* ii. 252, 208.

a. England. From Mr. Stephens' collection.
b. England.
c, d. Europe. From M. Becker's collection.
e. Odessa. Presented by Dr. Dowler.
f—h. ———?

Subfam. 4. APAMIDES.

Apamides, *Guén. Noct.* i. 178.

A. Thorax non densissime hirtus
  A. Alæ posticæ flavæ, marginatæ. - 1. THALPOPHILA, *Hübn.*
  B. Alæ posticæ obscuræ, aut albidæ.
    A. Palporum articulus 2us 3o plus quadruplo longior.
      a. Alæ pallidæ. - - - - 3. CALAMIA, *Hübn.*
      b. Alæ obscuræ.
        i. Thorax non lanuginosus. - 5. MAMESTRA, *Ochs.*
        ii. Thorax lanuginosus. - - 12. AMPHIA, *Guén.*
    B. Palporum articulus 2us 3o non quadruplo longior.
      a. Palpi porrecti, aut subascendentes.
        i. Alæ anticæ pallidæ. - - 2. LUPERINA, *Boisd.*
        ii. Alæ anticæ obscuræ.
          * Alæ anticæ margine exteriore denticulato.
            9. APAMEA, *Ochs.*
          ** Alæ anticæ margine exteriore non denticulato.
            † Alæ anticæ margine exteriore non rotundato.
              10. MIANA, *Steph.*
            †† Alæ anticæ margine exteriore rotundato.
              11. CELÆNA, *Steph.*
      b. Palpi ascendentes.
        i. Palporum articulus 3us 2i dimidio longior.
          6. CONDICA, *Walk.*
        ii. Palporum articulus 3us 2i dimidio non longior.
          13. PERIGEA, *Guén.*
B. Thorax densissime hirtus. - - 4. CRYMODES, *Guén.*
C. *Maris* abdomen valvis apicalibus longis, densissime lanuginosis.
  8. ERIOPYGA, *Guén.*
D. Abdomen subtus densissime pilosum. - 7. DASYGASTER, *Guén.*

Genus 1. THALPOPHILA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, oblique ascendentes; articulus 3us cylindricus, 2i triente non brevior. Antennæ corporis dimidio paullo longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore perpaullo obliquo. *Mas.*—Antennæ serratæ. *Fœm.*—Antennæ simplices.

Cerigo, *Steph. Ill. Brit. Haust.* ii. 5; *Boisd.; Dup.; Guénée, Ann. Soc. Ent. Fr.* vi. 363; *Noct.* i. 178.
Polia, p., *Treits.; Herr.-Schæff.*
Miselia, p., *Meig.*
Thalpophila, *Hübn. Verz. Schmett.* 208; *Steph. Cat. Brit. Lep.* 61.

Body stout. Proboscis moderately long. Palpi stout, pilose, obliquely ascending; third joint cylindrical, about one-third of the length of the second. Antennæ a little more than half the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight along the costa, rounded at the tips, very slightly oblique along the exterior border; second inferior vein rather nearer to the third than to the first; fourth moderately remote. *Male.*—Antennæ serrated. *Female.*—Antennæ simple.

1. Thalpophila Cytherea.

Cinereo-fusca; abdomen testaceum; alæ anticæ fuscæ, margine exteriore pallidiore venis albis, annulis duobus discalibus lineisque transversis undulatis albidis nigro-fusco marginatis; posticæ pallide luteæ, margine lato fuscescente, ciliis albidis.

——— ———, *Engr. Pap. d'Eur.* 430, a—d. *Harr. V. M.* 59.
Noctua Cytherea, *Fabr. Ent. Syst.* iii. 2, 57, 157. *Haw. Lep. Brit.* 161, 6. *God. Hist. Nat. Lép. Fr.* ii. 147, pl. 57.
Phalæna Matura, *Hüfn. Berl. Mag.* iii. 414.
Noctua texta, *Esp. Schmett.* iv. pl. 108, f. 6. *Bork. Eur. Schmett.* iv. 120, 48. *Hübn. Schmett. Eur. Noct.* pl. 23, 109; pl. 118, f. 547 (connexa, *Texte*).
Noctua prospicua, *Haw. Lep. Brit.* 161.
Polia texta, *Treit. Schmett.* v. 62, 20.
Noctua (Miselia) texta, *Meig. Syst. Besch.* iii. 129, 84, pl. 102, f. 10.
Cerigo texta, *Steph. Ill. Brit. Ent. Haust.* ii. 107.
Cerigo Cytherea, *Boisd. Ind. Méth.*, 101, 755. *Guén. Noct.* i. 179, 278. *Westw. & H. Brit. Moths*, i. 169, pl. 21, f. 10.
Thalpophila texta, *Hübn. Verz. Schmett.* 208, 2078. *Steph. Cat. Brit. Lep.* 61.
Polia Cytherea, *Herr.-Schæff. Eur. Schmett.* ii. 257, 225.

*—n. England. From Mr. Stephens' collection.
*—r. England.
*—u. Europe. From M. Becker's collection.
w. Europe. From Mr. Milne's collection.

Genus 2. LUPERINA.

Corpus robustum. Proboscis brevis. Palpi porrecti, pilosi caput superantes; articulus 3us longi-conicus, 2i quadrante brevior. Antennæ simplices, corporis dimidio breviores. Abdomen alas posticas dimidio superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ sat angustæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore subobliquo subdenticulato vix angulato.

Luperina, p., *Boisd. Ind. Méth.* 145; *Dup.*; *Guén.*
Sideridis, p., *Hübn. Verz. Schmett.* 232.
Dianthæcia, p., *Graslin.*
Polia, p., et Orthosia, p., *Herr.-Schæff.*

Body stout. Proboscis short. Palpi porrect, pilose, extending somewhat beyond the head; third joint elongate-conical, more than one-fourth of the length of the second. Antennæ simple, less than half the length of the body. Abdomen extending for half its length beyond the hind wings. Legs rather stout; hind tibiæ with four moderately long spurs. Wings rather narrow. Fore wings straight in front, somewhat rounded at the tips, slightly oblique and denticulated, and hardly angular along the exterior border; first, second and third inferior veins nearly contiguous at the base; fourth moderately remote.

1. Luperina luteago.

Cervina; thoraæ testaceo varius; abdomen testaceum; alæ anticæ basi posteriore, maculis variis fasciaque exteriore testaceis, guttis ciliaribus fuscis; posticæ testaceo-cinereæ, ciliis testaceis.

——— ———, *Engr. Pap. d'Eur.* 372, a, b?
Noctua luteago, *Wien. Verz.* 8, 6. *Fabr. Mant. Ins.* ii. 160, 169; *Ent. Syst.* iii. 2, 75, 216. *Hübn. Samml. Eur. Schmett.* 184.
Noctua lutea, *Bork. Eur. Schmett.* 296.
Noctua brunneago, *Esp. Schmett.* pl. 196, f. 2, 3.
Noctua olbiena, *Geyer, Samml. Eur. Schmett.* 829, 830.
Phalæna-Noctua luteago, *Gmel. ed. Syst. Nat.* i. 5, 2577, 1184.
Sideridis luteago, *Hübn. Verz. Schmett.* 232, 2330.
Gortyna luteago, *Treit. Schmett. Eur.* ii. 338.
Luperina luteago, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 246, pl. 23, f. 3, 4. *Boisd. Ind. Méth.* 145, 1169. *Guén. Ann. Soc. Ent. Fr.* vi.; *Noct.* i. 181, 279.

Dianthæcia luteago, *Graslin, Ann. Soc. Ent. Fr.* xi. 313, pl. 13, f. 8—10.
Polia luteago, *Herr.-Schæff. Eur. Schmett.* ii. 262, 241.
a, b. Europe. From M. Becker's collection.

2. LUPERINA FERRAGO.

Ferrugineo-ochracea; alæ anticæ fuscæ pone lineam undulatam valde flexuosam, strigis duabus simplicibus, stigmatis reniformis margine tenui fusco.

Luperina ferrago, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837; *Faun. Volg-Ural.* 276.
Noctua ferrago, *Frey. Neu. Beit. Schmett.* iv. 133, pl. 364.
Polia ferrago, *Herr.-Schæff. Eur. Schmett.* ii. 216, 105; ii. *Noct.* pl. 9, f. 41.
Luperina Caltheago, *Boisd. Ind. Méth.* 143, 1162.
Luperina ferrago, *Guén. Noct.* i. 181, 280.
South Russia.

3. LUPERINA RUBELLA.

Cervina; abdomen testaceum; alæ anticæ fascia obliqua diffusa ex parte obscuriore atomisque ferrugineis, punctis exterioribus in linea transversa nigricantibus; posticæ pallide testaceæ.

Luperina rubella, *Dup. Hist. Nat. Lép. Fr. Suppl.* ii. 249, pl. 23, f. 1. *Boisd. Ind. Méth.* 114, 870. *Guén. Noct.* i. 182, 281.
Orthosia rubella, *Herr.-Schæff. Eur. Schmett.* ii. 204, 72; ii. *Noct.* pl. 84, f. 431, 432.
South France.

Genus 3. CALAMIA.

Viridi et albicolor. Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, subascendentes; 2us 3o quadruplo longior; 3us conicus. Antennæ simplices, graciles, corporis dimidio longiores. Abdomen alas posticas plus triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor vix longis. Alæ mediocriter latæ, apud costam rectæ, apice subrotundatæ, margine exteriore mediocriter obliquo.

Calamia, p., *Hübn. Verz. Schmett.* 240.
Xylina, p., *Treit.*
Mithymna, p., *Meig.; Herr.-Schæff.*
Luperina, p., *Boisd.; Dup.; Guén.*

Colour green and white. Body stout. Proboscis moderately long. Palpi stout, pilose, slightly ascending; third joint conical, about one-fourth of the length of the second. Antennæ simple, slender, more than half the length of the body. Abdomen extending for more than one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four hardly long spurs. Wings moderately broad. Fore wings straight in front, somewhat rounded at the tips, moderately oblique along the exterior border.

1. CALAMIA VIRENS.

Alba; caput thoraxque supra viridia; alæ anticæ supra virides, margine tenui maculisque duabus discalibus nonnunquam obsoletis albis.

——— ———, *Engr. Pap. d'Eur.* 495, a—c.
Phalæna-Noctua virens, *Gmel. ed. Syst. Nat.* i. 5, 2561, 139.
Noctua virens, *Wien. Verz.* 85, B. 8. *Fabr. Mant. Ins.* ii. 173, 248; *Ent. Syst.* iii. 2, 103, 307. *Knock, Beit. Ins.* ii. pl. 1, f. 1. *Esp. Schmett.* iv. pl. 122, f. 1. *Bork. Eur. Schmett.* iv. 703, 310. *Hübn. Samml. Eur. Schmett. Noct.* pl. 48, f. 235.
Noctua (Mythimna) virens, *Meig. Handb.* 169, 53; *Syst. Besch.* iii. 154, 132, pl. 101, f. 12.
Xylina virens, *Treit. Schmett.* v. 2, 276, 16. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 104, f. 6.
Luperina virens, *Boisd. Ind. Méth.* 114, 877. *Guén. Noct.* i. 184, 286.
Calamia virens, *Hübn. Verz. Schmett.* 240, 2378.
Mythimna virens, *Herr.-Schæff. Eur. Schmett.* ii. 193, 36.

a. Europe. From M. Becker's collection.

Genus 4. CRYMODES.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, validi, pilosissimi; articulus 2us 3o quadruplo longior. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam vix convexæ,

apice rotundatæ, margine exteriore subdenticulato subconvexo mediocriter obliquo.

Crymodes, *Guén. Ind.* 238; *Noct.* i. 284. *Duponch.*
Hadena, p., *Boisd.; Zett.*
Polia, p., *Herr.-Schæff.*

Body stout. Proboscis moderately long. Palpi porrect, stout, very pilose; third joint not more than one-fourth of the length of the second. Antennæ simple, more than half the length of the body. Abdomen extending for full one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings hardly convex in front, rounded at the tips, slightly convex and denticulated, and moderately oblique along the fore part of the exterior border.

Europe.

1. Crymodes Grœnlandica.

Alæ anticæ cano nigroque variæ, strigis tribus dentatis distinctioribus albis, maculis ordinariis obsoletis; posticæ fuscæ basi dilutiores.

Hadena Grœnlandica, *Zett. Ins. Lapp.* 939, 9. *Lefebv. Ann. Soc. Ent. Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 228, pl. 21. *Boisd. Ind. Méth.* 119, 935.

Polia Grœnlandica, *Herr.-Schæff. Schmett. Eur.* ii. 274, 284, pl. 31, f. 151.

Crymodes Grœnlandica, *Guén. Noct.* i. 185, 287.

Lapland. Iceland. Greenland.

a. Lapland. Presented by F. Walker, Esq.

2. Crymodes frigida.

Alæ anticæ glauco nigroque variæ, maculis ordinariis fasciaque postica cinerascentibus; posticæ fuscæ.

Hadena frigida, *Zett. Ins. Lapp.* 930, 7.

Sweden. Norway. Lapland.

3. Crymodes Borea.

Nigro-fusca; alæ anticæ apud discum plus minusve albido et flavescente variæ, venis albidis, ciliis albo-ochraceis; posticæ flavescente-cinereæ, ciliis flavescente-albis.

Hadena Borea, *Boisd. Gen. et Ind. Méth.* 119, 936.
Crymodes Borea, *Guén. Noct.* i. 186, 291.

Lapland. Arctic America.

4. Crymodes Poli.

Ferruginea; abdomen cinereum; alæ anticæ venis albidis, fasciis undulatis maculisque reniformi et orbiculari subcinereis ex parte nigro marginatis; posticæ cinereæ, fascia marginoque lato fuscescentibus, ciliis albidis.

Polia cervina, *Herr.-Schæff. Eur. Schmett.* ii. 342.
Polia marmorata, *Herr.-Schæff. Eur. Schmett.* ii. pl. 451.
Crymodes Poli, *Guén. Noct.* i. 187, 292.

North Europe.

5. Crymodes Sommeri.

Alæ anticæ fusco cinereoque marmoratæ, strigis duabus dentatis nigris albo limbatis, maculis ordinariis cinerascentibus; posticæ fulvo-cinereæ.

Hadena Sommeri, *Lefebvre, Ann. Soc. Ent. Fr.* v. 391, pl. 10, f. 1. *Boisd. Ind. Méth.* 119, 934.
Crymodes Sommeri, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 187, 293. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 586, pl. 49, f. 1.

Iceland. Greenland.

North America.

6. Crymodes exulis.

Alæ anticæ fusco cinereoque variæ, fascia media rufescente, maculis ordinariis cinereis, reniformi dilutiore, striga postica dentata fulva, fimbria fulvo-fusco intersecta; posticæ fulvo-cinereæ, ciliis flavidis.

Hadena exulis, *Lefebvre, Ann. Soc. Ent. Fr.* v. 392, pl. 10, f. 2. *Boisd. Ind. Méth.* 119, 938. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 588, pl. 49, f. 2.
Crymodes exulis, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 185, 288.

Labrador.

7. Crymodes gelida.

C. Grœnlandica *affinis, minor; thorax cinereo varius; alæ ciliis albis vix flavescentibus; anticæ pallide cinereæ, lateribus, lineis maculisque albidis, nigro minus marginatis, macula orbiculari plus rotundato.*

Crymodes gelida, *Guén. Noct.* i. 186, 289.

Arctic America?

8. Crymodes gelata.

Alæ anticæ fusco cinereoque nebulosæ, strigis tribus dentatis nigrofuscis, maculis ordinariis distincte albidis; posticæ fulvocinereæ, margine fuscæ, ciliis flavidis.

Hadena gelata, *Lefebvre, Ann. Soc. Ent. Fr.* v. 393, pl. 10, f. 3. *Boisd. Ind. Méth.* 119, 937.

Crymodes gelata, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 186, 290. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 590, pl. 49, f. 3.

Hadena marmorata? *Zett. Ins. Lapp.* 937.

Polia gelata, *Herr.-Schæff. Eur. Schmett.* ii. 267, 264, pl. 86, f. 452, 453.

Europe? Labrador.

Genus 5. MAMESTRA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, porrecti, pilosi, caput superantes; articulus 3us longi-conicus, 2i quadrante non longior. Antennæ corporis dimidio vix longiores. Abdomen cristatum, alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore denticulato mediocriter obliquo. *Mas.*—Antennæ vix ciliatæ.

Chera, p., Tholera, p., Hadena, p., Diataraxia, p., Barathra, Melanchra, *Hübn. Verz. Schmett.*

Mamestra, p., et Apamea, p., *Ochs.; Treit.; Steph.*

Hadena, p., *Treit.; Dup.*

Mamestra et Luperina, p., *Guén.*

Agrotis, p., *Curt.*

Hama, p., *Duponch.; Steph.*

Charæas, p., *Steph.*

Graphiphora? p., *Steph.*

Hadena et Luperina, p., *Boisd.; Dup.*
Aplecta, p., *Boisd.*
Polia, p., *Herr.-Schæff.*

Body stout. Proboscis moderately long. Palpi stout, porrect pilose, extending somewhat beyond the head; third joint elongate conical, about one-fourth of the length of the second. Antennæ hardly more than half the length of the body. Abdomen crested extending for one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, somewhat rounded at the tips, denticulated and moderately oblique along the exterior border; second inferior vein nearer to the third than to the first; fourth hardly remote. *Male.*—Antennæ hardly ciliated.

Europe.

Group 1.

Statura sat magna. Abdomen subcristatum.

Size rather large. Abdomen slightly crested.

1. Mamestra chenopodiphaga.

Mas. *Alæ anticæ fusco-virescentes, linea externa angulata, angulis quatuor longioribus; maculis ordinariis una conjunctis.*

Mamestra chenopodiphaga, *Boisd.; Rambur, Ann. Soc. Ent. Fr.* i. 283, pl. 9, f. 7. *Frey. Neu. Beit. Schmett.* iii. pl. 209, f. 1. *Geyer, Samml. Eur. Schmett.* 831, 832. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 251, pl. 23, f. 5. *Guén. Ann Soc. Ent. Fr.* vi. 245; *Noct.* i. 190, 295.
Aplecta chenopodiphaga, *Boisd. Ind. Méth.* 122, 969.
Polia chenopodiphaga, *Herr.-Schæff. Eur. Schmett.* ii. 264, 251.

South France. Corsica.

a, b. Europe. From M. Becker's collection.

2. Mamestra immunda.

Fusca; abdomen cinereum; alæ anticæ fasciis angulosis pallidioribus nigro-fusco marginatis, linea transversa exteriore e guttis albidis, maculis reniformi et orbiculari bene determinatis illi extus albido marginata; posticæ glauco-cinereæ, ciliis albidis.

Mamestra immunda, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842. *Faun. Volg-Ural.* 195. *Guén. Noct.* i. 190, 296.

olia immunda, *Herr.-Schæff. Eur. Schmett.* ii. 266, 256, pl. 33, f. 161, 162.

outh Russia.

3. Mamestra serratilinea.

Pallide cinerea; thorax fasciis undulatis vix conspicuis obscuri-ribus; alæ anticæ lineis undulatis transversis annulisque dis-calibus obscurioribus guttis duabus apud annulum reniformem lineaque undulata exteriore albidis.

Iamestra serratilinea, *Ochs. Syst. Gloss.* 74, 8. *Treit. Schmett. Eur.* ii. 38. *Guén. Ann. Soc. Ent. Fr.* vi. 245; *Noct.* i. 191, 298.

Iadena serratilinea, *Dup. Hist. Nat. Lép. Fr.* iii. 430, pl. 99.

plecta serratilinea, *Boisd. Ind. Méth.* 122, 970.

Ioctua Polyodon, *Hübn. Samml. Eur. Schmett. Noct.* f. 365.

'hera serratilinea, *Hübn. Verz. Schmett.* 211, 2111.

'olia serratilinea, *Herr.-Schæff. Schmett. Eur.* ii. 271, 274, pl. 77, f. 395.

witzerland. Austria. Hungary.

. Europe. From M. Becker's collection.

4. Mamestra Zeta.

M. serratilinea *similis; macula reniformis signo ζ albo notata; fimbriæ latiores, cinereo albidoque variæ.*

'olia Zeta, *Treit. Schmett. Eur.* ii. 33. *Herr.-Schæff. Eur. Schmett.* ii. 271, 273, pl. 81, f. 416.

Iplecta Zeta, *Boisd. Ind. Méth.* 122, 971. *Guén. Ann. Soc. Ent. Fr.* vi. 416, 238; *Noct.* i. 191, 299.

Iustria.

5. Mamestra Bischoffii.

Cinerea aut glaucescens; alæ anticæ fasciis obscurioribus, fasciis undulatis maculisque reniformi et orbiculari testaceis ex parte nigro marginatis, linea transversa exteriore e guttis albidis; posticæ cinereæ, basi pallidiores, ciliis albidis.

Var.? *Alæ posticæ pallide cinereæ, lineis duabus margineque obscurioribus.*

Polia Bischoffii, *Herr.-Schæff. Eur. Schmett.* ii. 265, 255, pl. 85, f. 440; pl. 87, f. 449.

Mamestra Bischoffii, *Guén. Noct.* i. 191, 300.

Constantinople.

6. Mamestra Pernix.

Cinerea; abdomen rufescente-cinereum; alæ anticæ fasciis undulatis fuscis canescente marginatis, linea transversa exteriore e guttis albidis, lunula discali testacea; posticæ nigro-cinereæ, basi rufescente-cinereæ, ciliis testaceis.

Noctua Pernix, *Geyer, Samml. Eur. Schmett.* 801. *Frey. Neu. Beit. Schmett.* iii. 57, pl. 282, f. 2, 3.

Luperina pernix, *Boisd. Ind. Méth.* 115, 889. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 189, pl. 18.

Mamestra pernix, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 192, 301.

Hadena clandestina, *Boisd. Ind. Méth.* Ed. 1, 65.

Polia Pernix, *Herr.-Schæff. Eur. Schmett.* ii. 265, 253, pl. 11, f. 54.

Var. Mamestra rivalis, *Friv.*

Switzerland. Pyrenees. Turkey.

7. Mamestra Bugnioni.

Luperina Bugnioni, *Boisn. Ind. Méth.* 115, 891.

Mamestra Bugnioni, *Guén. Noct.* i. 192, 302.

Switzerland.

8. Mamestra Maillardi.

Obscure cinerea; abdomen cinerascens; alæ anticæ albo conspersæ, nigro nebulosæ, guttis costalibus lunulaque discali albidis; posticæ cinerascentes.

Noctua Maillardi, *Geyer, Samml. Eur. Schmett.* 833.

Luperina Maillardi, *Boisd. Ind. Méth.* 890. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 191, pl. 18.

Polia Maillardi, *Herr.-Schæff. Eur. Schmett.* ii. 271, 275, pl. 11, f. 55.

Mamestra Maillardi, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 192, 303.

Switzerland.

a, b. Europe. From M. Becker's collection.

9. Mamestra arctica.

Rubida; abdomen cervinum; alæ anticæ punctis variis fasciisque duabus diffusis nigro marginatis virescente albidis, fascia exteriore cervina testaceo marginata, macula discali testacea; posticæ cervinæ, albido ciliatæ.

Hadena arctica, *Boisd. Icones; Ind. Méth.* 120, 947.
Polia arctica, *Herr.-Schæff. Eur. Schmett.* ii. 272, 279, pl. 31, f. 155. *Guén. Ann. Soc. Ent. Fr. Ind.* 244; *Noct.* i. 193, 304.

Lapland. Siberia.

a, b. Scotland. From Mr. Stephens' collection.
c—i. Trenton Falls, New York. Presented by E. Doubleday, Esq.
k. Massachusetts. From Prof. Sheppard's collection.
l—o. Nova Scotia. From Lieut. Redman's collection.
p. Orilla, West Canada. From Mr. Bush's collection.

10. Mamestra rubrirena.

Nigro-cinerea; abdomen cinereum; alæ anticæ guttis costalibus albidis, maculis reniformi et orbiculari nonnullisque minoribus ferrugineis, linea transversa exteriore undulata guttisque marginalibus testaceis; posticæ cinereæ.

Hadena rubrirena, *Treit. Schmett. Eur.* ii. 159.
Noctua rubrirena, *Frey. Beitr. Ges. Eur. Schmett.* pl. 98, f. 2. *Geyer, Samml. Eur. Schmett.* 826. *Boisd. Ind. Méth.* 120, 942.
Mamestra rubrirena, *Guén. Ann. Soc. Ent. Fr* vi. 238; *Noct.* i. 193, 305.
Hadena Feisthamelii, *Boisd. Ann. Soc. Ent. Fr.* ii. 375, pl. 14, f. 1; *Icon. Lép. d'Eur.* pl. 84. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 226, pl. 21.
Polia rubrirena, *Herr.-Schæff. Schmett. Eur.* ii. 276, 292, pl. 12, f. 57.

Switzerland. Hungary.

a. Europe. From M. Becker's collection.

11. Mamestra cespitis.

Nigricans; abdomen cinereum; alæ anticæ maculis reniformi et orbiculari lineisque transversis angulosis atris cinereo margi-natis; posticæ albidæ, cinereo marginatæ.

———, *Engr. Pap. d'Eur.* 459, a—c.

Noctua cespitis, *Wien. Verz.* 82, 2. *Fabr. Mant. Ins.* ii. 156, 148; *Ent. Syst.* iii. 2, 191. *Klèem, Beit. Ins. Gesch.* i. pl. 2, f. 1—10. *Bork. Eur. Schmett.* 163. *Hübn. Samml. Eur. Schmett.* 428.

Phalæna-Noctua cespitis, *Gmel. ed. Syst. Nat.* i. 5, 2543, 1035.

Hadena cespitis, *Treit. Schmett. Eur.* ii. 115. *Dup. Hist. Nat. Lép. Fr.* iv. 26, pl. 102.

Charæas cespitis, *Steph. Ill. Brit. Haust.* ii. 109. *Westw. & H. Brit. Moths*, i. 111, pl. 22, f. 4, 5.

Noctua Hordei, *Schrank, Faun. Boic.* ii. 1, 351.

Tholera cespitis, *Hübn. Verz. Schmett.* 215, 2139.

Var. Agrotis autumnalis, *Curt. Brit. Ent.* 165.

Var. Charæas confinis, *Steph. Ill. Brit. Ent. Haust.* ii. 109.

Luperina cespitis, *Boisd. Ind. Méth.* 113, 866. *Guén. Noct.* i. 284, 285.

Polia cespitis, *Herr.-Schæff. Eur. Schmett.* ii. 269, 268.

a. England. From Mr. Haworth's collection.
b—g. England. From Mr. Stephens' collection.
h, i. England.
j—k. Europe. From M. Becker's collection.

Group 2.

Abdomen subcristatum. Alæ anticæ margine exteriore integro rotundato; macula reniformis guttis exterioribus pallidis.

Abdomen slightly crested. Exterior border of the fore wings entire, rounded; reniform marked exteriorly with one or several pale dots.

12. Mamestra abjecta.

Cinerea; abdomen canum; alæ anticæ lineis transversis undulatis incompletis canis ex parte nigro marginatis, gutta punctoque discalibus canis, strigis exterioribus lanceolatis nigris; posticæ albidæ, margine cinereo.

Noctua abjecta, *Hübn. Samml. Eur. Schmett. Noct.* pl. 116, 539.

Luperina abjecta, *Boisd. Ind. Méth.* 114, 875.

Mamestra abjecta, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 193, 306.
Noctua nigricans, *View. Schmett.* ii. 66, 101.
Mamestra nigricans, *Treit. Schmett. Eur.* ii. 141. *Steph. Ill. Brit. Haust.* iii. 193, pl. 24, f. 12. *Eversm. Faun. Volg-Ural.* 245.
Hadena abjecta, *Hübn. Verz. Schmett.* 216, 2154.
Var. Noctua lunulina, *Haw. Lep. Brit.* 192.
Graphiphora? lunulina, *Steph. Ill. Brit. Ent. Haust.* ii. 130.
Polia abjecta, *Herr.-Schæff. Eur. Schmett.* ii. 270, 271.
Var. Luperina Fribolus. *Boisd. Icon.* pl. 84, f. 4.
Noctua nigricans, *Frey.* iv. 35, pl. 311.

Europe.

a. England.

Var. *Nigro-cinerea; abdomen cinereum; alæ anticæ maculis reniformi et orbiculari lineisque transversis undulatis nigris, his cinereo marginatis, strigis exterioribus lanceolatis nigris; posticæ cinereæ, margine obscuriore.* Mas.—*Abdomen rufescente-cinereum.*

Canada.

a, b. New York. Presented by E. Doubleday, Esq.

13. Mamestra anceps.

Pallide cervina; abdomen albido-testaceum; alæ anticæ annulis reniformi et orbiculari lineisque transversis undulatis albidis aut testaceis fusco marginatis, lineolis exterioribus lunulisque marginalibus fuscis; posticæ albidæ, margine fuscescente.

Var. *Fusco-ferruginea; abdomen et alæ posticæ fusco-cinerea; alæ anticæ annulis lineisque pallidioribus nigro marginatis.*

Noctua anceps, *Hübn. Samml. Eur. Schmett. Noct.* pl. 102, f. 484. *Wien. Verz.* 22?
Mamestra anceps, *Guén. Noct.* i. 195, 309.
Noctua sordida. *Bork. Eur. Schmett.* iv. 378, 239.
Noctua contigua, *Haw. Lep. Brit.* 192, 91.
Apamea infesta, *Ochs. Schmett. Eur.* iv. 76. *Treit. Schmett.* v. 2, 112.
Luperina infesta, *Boisd. Ind. Méth.* 114, 872. *Dup. Hist. Nat. Lép. Fr.* iv. 29, pl. 102, f. 2, 6. *Steph. Ill. Brit. Ent. Haust.* iii. 4. *Westw. & H. Brit. Moths*, i. 170, pl. 35, f. 6.

Polia infesta, *Herr.-Schæff. Schmett. Eur.* ii. 273, 280.
Diataraxia aliena, *Hübn. Verz. Schmett.* 219.
Var. Luperina Benardii, *Boisd. Ind. Méth.* 114, 871.

a—k. England. From Mr. Stephens' collection.
l—o. England.
p—r. Europe. From M. Becker's collection.
s—v. ——— ?

14. Mamestra albicolon.

Cinereo-fusca; abdomen cinereum; alæ anticæ strigulis transvers nigricantibus, puncto guttaque arcuata discalibus albis; po ticæ cinereæ, margine fusco.

Noctua albicolon, *Sepp, Ins.* ii. pl. 1, f. 1—9. *Hübn. Samml. Eu Schmett. Noct.* pl. 117, f. 542, 543.
Barathra albicolon, *Hübn. Verz. Schmett.* 218, 2185.
Luperina albicolon, *Boisd. Ind. Méth.* 114, 873.
Mamestra albicolon, *Treit. Schmett. Eur.* ii. 147. *Dup. Hist. Na Lép. Fr.* iv. 272, pl. 117. *Guén. Ann. Soc. Ent. Fr.* vi. 238 *Noct.* i. 196, 310. *Steph. Ill. Brit. Ent. Haust.* ii. 195, pl. 2 f. 3.
Polia albicolon, *Herr.-Schæff. Eur. Schmett.* ii. 270, 272.

a—d. England. From Mr. Stephens' collection.
e, f. England.
g, h. Europe. From M. Becker's collection.

15. Mamestra Leineri.

Lateritio ferruginea; abdomen flavescente-cinereum; alæ anti stigmate reniformi intus albo-cincto, signaturis pallidis; p ticæ flavescente-cinereæ.

Noctua Leineri, *Frey. Neu. Beit. Schmett.* ii. 145, pl. 184, f. 3.
Luperina Leineri, *Boisd. Ind. Méth.* 114, 882.
Polia Leineri, *Herr.-Schæff. Eur. Schmett.* ii. 272, 277, pl. 2 f. 102.
Mamestra Leineri, *Guén. Ann. Soc. Ent. Fr.* vi. 258; *Noct.* i. 1 311.

Hungary. South Russia. Mount Balkan.

16. Mamestra cervina.

Lateritio-ferruginea; abdomen cinereum; alæ anticæ nigro conspersæ, maculis reniformi et orbiculari, fascia exteriore strigisque marginalibus testaceis, striga discali clavata alba; posticæ nigro-cinereæ, basi pallidiores.

Mamestra cervina, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842, 111, 546, 3; *Faun. Volg-Ural.* 246. *Guén. Noct.* i. 197, 312.
Polia cervina, *Herr.-Schæff. Eur. Schmett.* ii. 272, pl. 33, f. 163, 164.

Sarepta.

Group 3.

Abdomen *maris* et *fœm.* valde cristatum. Alæ anticæ lituris bene determinatis; macula reniformis tota aut fere tota pallida.

Abdomen of the male and of the female distinctly crested. Fore wings with distinct marks; reniform spot wholly, or almost wholly pale.

17. Mamestra furva.

Cinereo-fusca; abdomen cinereum; alæ anticæ fasciis angulosis pallidioribus nigricante marginatis, linea transversa angulosa exteriore albida, macula reniformi albido marginata; posticæ cinereæ margine, lata fuscescente.

Noctua furva, *Wien. Verz.* 81, 20. *Hübn. Samml. Eur. Schmett. Noct.* f. 407.
Luperina furva, *Boisd. Ind. Méth.* 114, 876.
Mamestra furva, *Treit. Schmett. Eur.* ii. 154. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 276, pl. 25. *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 197, 313.
Noctua Freyeri, *Frey. Neu. Beit. Schmett.* ii. 107, pl. 159.
Tholera furva, *Hübn. Verz. Schmett.* 215, 2140.
Mamestra anceps? *Westw. & H. Brit. Moths*, i. 175, pl. 36, f. 15.
Hama furva, *Steph. Cat. Brit. Lep.* 90.
Var. Mamestra furva, *Eversm. Faun. Volg-Ural.* 247.
Mamestra infernalis, *Eversm. Bull. Soc. Imp. Mosc.* 1842.
Var. Mamestra silvicola, *Eversm. Bull. Soc. Imp. Mosc.* 1842; *Faun. Volg-Ural.* 247.
Polia furva, *Herr.-Schæff. Schmett. Eur.* ii. 276, 291, pl. 58, f. 290.

a. England. Presented by — Dyson, Esq.
b—d. England. From Mr. Stephens' collection.
e, f. England.

18. Mamestra Brassicæ.

Fusca; abdomen pallidissime fuscescens, crista fusca; alæ anticæ annulis discalibus lineisque undulatis transversis nigris, litura discali fasciaque tenui submarginali albis nigro marginatis; posticæ cinereo-fuscæ.

——— ———, *Göed. Ins.* 3, pl. 5. *Merian, Ins. Eur.* pl. 81. *Frisch. Ins.* 10, pl. 16. *Albin, Nat. Hist. Engl. Ins.* pl. 28, 23; pl. 29, 45. *Roës. Ins. Bel.* i. pl. 29. *Réaum. Ins.* i. pl. 40, 41. *Deg. Ins.* ii. 438. *Engr. Pap. d'Eur.* 456, a—c, e, f. 161.

Phalæna-Noctua Brassicæ, *Linn. Syst. Nat.* i. 516; *Faun. Suec.* 1205. *Gmel. ed. Syst. Nat.* i. 5, 2542, 163.

Noctua Brassicæ, *Wien. Verz.* 81, 21. *Fabr. Ent Syst.* iii. 2, 67, 189. *Bork. Eur. Schmett.* iv. 584, 242. *Sepp. Ins.* ii. pl. 1; *Esp. Schmett.* iv. pl. 159, f. 1—6. *Hübn. Eur. Schmett. Noct.* pl. 18, f. 88. *Haw. Lep. Brit.* 191.

Mamestra Brassicæ, *Treit. Schmett.* v. 2, 150, 9. *Dup. Hist. Nat. Lep. Fr.* vii. 149, pl. 102, f. 5. *Steph. Ill. Brit. Ent. Haust.* ii. 194. *Westw. & H. Brit. Moths*, i. 174, pl. 36, f. 8, 9. *Guén. Noct.* i. 198, 314.

Hadena Brassicæ, *Boisd. Ind. Méth.* 118, 915.

Polia Brassicæ, *Herr.-Schæff. Eur. Schmett.* ii. 270, 269.

Noctua (Mamestra) Brassicæ, *Meig. Handb.* 166, 45; *Syst. Besch.* iii. 140, 106, pl. 104, f. 11.

Barathra Brassicæ, *Hübn. Verz. Schmett.* 218, 2184.

Noctua albidilinea, *Haw. Lep. Brit.* 191.

Mamestra albidilinea, *Steph. Ill. Brit. Ent. Haust.* ii. 195.

a—m. England. From Mr. Stephens' collection.
n—r. England.
s—u. Europe. From M. Becker's collection.
w. Orilla, West Canada. From Mr. Bush's collection.

19. Mamestra Persicariæ.

Nigricans; abdomen cinerascens, crista nigricante; alæ anticæ punctis nonnullis albis, lineis transversis undulatis fulvis nigro marginatis, macula discali alba luteo signata; posticæ albidæ, margine lato guttaque discali cinereis.

——— ———, *Albin, Nat. Hist. Engl. Ins.* pl. 77, a—d. *Ammir. Ins.* pl. 157. *Geoff. Ins. Par.* ii. 157. *Roës. Ins. Bel.* i. pl. 30. *Engr. Pap. d'Eur.* 335, a—e.

Phalæna-Noctua Persicariæ, *Linn. Faun. Suec.* 1208. *Gmel. ed. Syst. Nat.* i. 5, 2562, 142.

Noctua Persicariæ, *Wien. Verz.* 71, 8. *Fabr. Sp. Ins.* ii. 236, 132; *Mant. Ins.* ii. 177, 268; *Ent. Syst.* iii. 2, 111, 335. *Esp. Schmett.* iv. pl. 129, f. 1, 2. *Sepp, Ins.* ii. pl. 10. *Donov. Nat. Hist. Brit. Ins.* ix. pl. 317. *Bork. Eur. Schmett.* iv. 162, 66. *Hübn. Samml. Eur. Schmett. Noct.* pl. 13, f. 64. *Haw. Lep. Brit.* 88.

Noctua (Mamestra) Persicariæ, *Meig. Handb.* 166, 46; *Syst. Besch.* iii. 138, 102, pl. 104, f. 4.

Melanchra Persicariæ, *Hübn. Verz. Schmett.* 118, 913.

Mamestra Persicariæ, *Treit. Schmett.* v. 2, 156, 11. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 102, f. 4. *Steph. Ill. Brit. Ent. Haust.* ii. 196. *Guén. Noct.* i. 199, 315.

Var. **Noctua accipitrina**, *Esp. Schmett.* pl. 129, f. 4.

Hadena Persicariæ, *Boisd. Ind. Méth.* 118, 913.

Polia Persicariæ, *Herr.-Schæff. Schmett. Eur.* ii. 275, 288.

s—q. England. From Mr. Stephens' collection.
r—u. England.
x—aa. Europe. From M. Becker's collection.

North America.

Group 1.

Like the second European group.

20. Mamestra impulsa.

Nigra; abdomen cinereum; alæ anticæ annulis reniformi et orbiculari lineisque transversis undulatis incompletis atris, gutta discali punctisque exterioribus nonnunquam vix conspicuis testaceis; posticæ pallide cinereæ, lineis duabus discalibus abbreviatis margineque lato obscure cinereis.

Mamestra impulsa, *Guén. Noct.* i. 194, 307.

a—c. Trenton Falls, New York. Presented by E. Doubleday Esq.

21. Mamestra passer.

Cinereo-fusca; abdomen cinereum; alæ anticæ annulis reniformi et orbiculari incompletis, striga postica, lineolis exterioribus nonnunquam obsoletis guttisque marginalibus nigris; posticæ cinereæ.

Mamestra Passer, *Guén. Noct.* i. 195, 308.

a, *b*. New York. Presented by E. Doubleday, Esq.

22. Mamestra dubitans.

Mas et fœm. *Ferruginea; abdomen cinereum, pilis apicalibus cervinis aut rufescentibus; alæ anticæ testaceo subnotatæ, apud venas albido conspersæ, lineis transversis fuscis, guttis costalibus albis, maculis reniformi et orbiculari fusco marginatis testaceo variis; posticæ cinereæ.*

Male and female. Ferruginous. Abdomen cinereous, with fawn-coloured or reddish hairs at the tip. Fore wings with transverse brown lines, with some slight testaceous marks, with some whitish speckles on the veins, and with some white dots near the tip of the costa; reniform spot and orbicular spot with brown borders, the former mostly testaceous. Hind wings cinereous, paler at the base. *Var.* Orbicular spot partly testaceous. Length of the body 7—8 lines; of the wings 16—18 lines.

a—c. Trenton Falls, New York. Presented by E. Doubleday, Esq.
d—f. Nova Scotia. From Lieut. Redman's collection.

23. Mamestra ordinaria.

Mas et fœm. *Cinerea; abdomen canum; alæ anticæ lineis transversis undulatis nigricantibus plus minusve cano marginatis, guttis costalibus albis, lunulis marginalibus nigricantibus, maculis reniformi et orbiculari ex parte albo marginatis; posticæ cinereæ, marginibus fuscescentibus.*

Male and female. Cinereous. Abdomen hoary. Fore wings with transverse undulating blackish lines, whose borders are more or less hoary; some white dots towards the tip of the costa; marginal lunules black or dark brown; reniform spot and orbicular spot occasionally partly bordered with white. Hind wings cinereous, with brownish borders and whitish ciliæ. *Male.*—Fore wings with incomplete cinereous-brown bands, or almost wholly dark cinereous-brown. Length of the body 7—8 lines; of the wings 18—20 lines.

a—f. Trenton Falls New York. Presented by E. Doubleday, Esq.

24. Mamestra contenta.

Fusca aut cinerea; thorax fasciis indistinctis obscurioribus; abdomen cinereum; alæ anticæ lineis transversis angulosis pallidioribus nigro aut fusco marginatis, maculis reniformi et orbiculari magnis distinctis, guttis costalibus albis, lunulis marginalibus nigris; posticæ cinereæ, fusco marginatæ, ciliis albidis.

Brown or cinereous. Thorax with indistinct darker bands. Abdomen cinereous. Fore wings with transverse angulose paler lines, which have blackish or brownish borders; reniform spot and orbicular spot large, distinct, their borders like the transverse lines in colour; some white dots towards the tip of the costa, and a marginal row of black lunules. Hind wings cinereous, with brownish borders and whitish ciliæ. Length of the body 7 lines; of the wings 17 lines.

c—d. Nova Scotia. From Lieut. Redman's collection.

25. Mamestra unicolor.

Fœm. *Murina; abdomen cinereum; alæ anticæ lituris costalibus et nonnunquam basalibus nigris, maculis reniformi et orbiculari non bene determinatis; posticæ albidæ, cinereo marginatæ.*

Female. Mouse-colour. Abdomen cinereous. Fore wings with some black costal marks, and a few black basal marks, the latter sometimes obsolete; reniform and orbicular ringlets variable as to shape, and more or less incomplete. Hind wings whitish, with cinereous borders. Length of the body 6—7 lines; of the wings 16—18 lines.

This may be the female of *M. Passer*.

c—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.

e. St. Martin's Falls, Albany River, Hudson's Bay. Presented by G. Barnston, Esq.

f—h. Nova Scotia. From Lieut. Redman's collection.

26. Mamestra insulsa.

Fœm. *Obscure ferrugineo-fusco; abdomen fusco-cinereum; alæ anticæ lituris basalibus et costalibus nigris; lineis transversis undulatis duplicatis nigris ex parte testaceo marginatis, linea exteriore transversa undulata incompleta testacea, maculis reniformi et orbiculari magnis ex parte testaceis; posticæ cinereæ, marginibus fuscis.*

Female. Dark ferruginous-brown. Abdomen brownish cinereous. Fore wings with black marks at the base and along the costa, and with transverse undulating black double lines, which are partly bordered with testaceous; an exterior incomplete transverse undulating testaceous line; reniform spot and orbicular spot large partly testaceous, the latter somewhat oval. Hind wings cinereous with brown borders, and pale cinereous ciliæ. Length of the body 7 lines; of the wings 16 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

Group 2.

Like the third European group.

27. Mamestra adjuncta.

Mas et fœm. *Cinereo-nigricans; abdomen cinereum; alæ anticæ litura basali, annulis reniformi et orbiculari fasciaque angulosa submarginali albis; posticæ pallide cinereæ, lineis duabus angulosis margineque fusco-cinereis.*

Mamestra adjuncta (*Boisd. MSS.*), *Guén. Noct.* i. 199, 315.

a, b. Trenton Falls, New York. Presented by E. Doubleday Esq.

Mexico.

Group 1.

Like the third European group.

28. Mamestra configurata.

Mas. *Fusco-cervina; thorax nigro fasciatus; abdomen nigro cristatum; alæ anticæ nigricante variæ, lituris basalibus et costalibus, lineis transversis incompletis, maculis discalibus lunulisque marginalibus nigris, maculis albo notatis, linea exteriore transversa undulata alba; posticæ albæ, marginibus latis fuscescentibus.*

Apamidæ

Male. Brownish fawn-colour. Thorax with black bands. Abdomen with black crests. Fore wings here and there blackish; costal and basal marks, some imperfect transverse lines, reniform and orbicular ringlets, and another ringlet behind the reniform one, and marginal lunules black; some white marks on the ringlets, and a white transverse undulating exterior line. Hind wings whitish, with broad brownish borders. Length of the body 5½ lines; of the wings 16 lines.

a. Mexico. Presented by E. Doubleday, Esq.

South America.

Group 1.

Like the first European group.

29. Mamestra calidipes.

Pectus, abdomen basi pedesque longissime et densissime hirta; alæ anticæ testaceo-cinereæ, fusco et rufescente conspersæ, ciliis linea nigricante divisis; posticæ flavescente-albæ, margine lato nigricante.

Mamestra calidipes, *Guén. Noct.* i. 189, 294.

Brazil.

30. Mamestra decolora.

Alæ anticæ pallide testaceo-cinereæ, lineis maculisque pallidioribus, macula orbiculari parva rotunda, guttis marginalibus obscurioribus, ciliis longis densis; posticæ sordide albidæ, margine lato cinereo.

Mamestra decolora, *Guén. Noct.* i. 190, 297.

Colombia.

31. Mamestra crista.

Ferrugineo-fusca; thorax et alæ anticæ subpurpurascentia; abdomen fusco-cinereum; tarsi testaceo fasciati; alæ anticæ lineis duabus transversis indistinctis undulatis testaceis, guttis costalibus albido-testaceis, gutta basali punctisque marginalibus albidis, maculis reniformi et orbiculari testaceis nigro marginatis; posticæ fuscescentes, basi cinereæ.

Noctua crista, *Morritz, MSS.*

Ferruginous-brown. Thorax and fore wings with a slight purplish tinge. Abdomen brownish cinereous. Tarsi with testaceous bands. Fore wings with two indistinct undulating dull testaceous transverse lines, with some whitish testaceous dots along the costa, with a whitish dot at the base, and with whitish marginal points; a testaceous dot at half the distance from the base to the orbicular spot, which is small and oblong; reniform spot large, testaceous, with a black border like the other. Hind wings brownish, cinereous towards the base. Length of the body 7 lines; of the wings 18 lines.

Venezuela. In Mr. Saunders' collection.

32. Mamestra inducta.

Cinerea; caput et thorax anticus obscuriora; tarsi testaceo fasciati; alæ anticæ lineis transversis undulatis canis fusco marginatis, lituris costalibus et lunulis marginalibus nigris, maculis orbiculari et reniformi distinctis canis nigro marginatis; posticæ pallide cinereæ, marginibus fuscescentibus, ciliis albidis.

Cinereous. Head and fore part of the thorax darker. Tarsi with testaceous bands. Fore wings with transverse undulating hoary brown-bordered lines; costal marks and marginal lunules black; orbicular spot and reniform spot distinct, hoary, with blackish borders, the former large and nearly round. Hind wings pale cinereous, with brownish borders; ciliæ whitish. Length of the body 7 lines; of the wings 18 lines.

a. Venezuela. From Mr. Dyson's collection.

33. Mamestra? tessellata.

Cinereo-nigra; abdomen pallide cinereum; alæ anticæ lineis transversis nigris; posticæ pallide cinereæ, margine nigro-cinereo, fascia strigaque postica albidis.

Phalæna-Noctua tessellata, *Anon. Ins. Surin.* pl. 77.

Surinam.

Asia.

34. Mamestra infausta.

Nigricans, cinereo conspersa; alæ anticæ nigro-fuscæ, lineis transversis undulatis atris, maculis reniformi et orbiculari indistinctis ex parte cervino marginatis, lituris nonnullis exterioribus cervinis; posticæ fuscæ.

Blackish, sprinkled with cinereous. Fore wings blackish brown, with deep black transverse undulating lines; reniform and orbicular spots indistinct; part of their borders, and some exterior and submarginal marks dull fawn-colour. Hind wings brown. Length of the body 8 lines; of the wings 20 lines.

a. Silhet. From Mr. Argent's collection.

Australia.

Group 1.

Abdomen valde cristatum. Alæ anticæ margine exteriore denticulato; posticæ marginibus nigricantibus.

Abdomen distinctly crested. Fore wings with the exterior border denticulated. Hind wings with blackish borders.

35. Mamestra sepultrix.

Nigricans, cinereo conspersæ; abdomen nigro-cinereum, basi pallide cinereum; alæ anticæ lineis transversis undulatis lunulisque marginalibus atris, lineolis nonnullis luteis, maculis reniformi et orbiculari luteo marginatis, illa albido signata; posticæ basi canescentes.

Var. *Alæ anticæ magis cinerascentes, lineolis nullis luteis, macula exteriore testacea, maculis reniformi et orbiculari nigro marginatis.*

Mamestra sepultrix, *Guén. Noct.* i. 200, 317.

a. Tasmania. Presented by Morton Allport, Esq.

36. Mamestra nigerrima.

Nigra; abdomen nigricans basi albidum, aut albidum crista nigra; tarsi albo annulati; alæ anticæ lineis transversis angulosis strigisque lanceolatis exterioribus atris, litura discali alba aut lutea nonnunquam obsoleta; posticæ albæ, margine latissimo nigricante.

Mamestra nigerrima, *Guén. Noct.* i. 200, 318.

Australia.

a, *b*. Tasmania. Presented by Morton Allport, Esq.
c. Tasmania. From Mr. A. J. Smith's collection.
d. Tasmania. Presented by the Entomological Club.
e. Sydney. Presented by E. Doubleday, Esq.
f. Australia. Presented by the late Earl of Derby.
g. Australia. Presented by Capt. Gray.
h. ———?

37. Mamestra aterrima.

Fœm. *Atra; abdomen nigro-cinereum, atra cristatum; tarsi albido fasciati; alæ anticæ breviusculæ, latiusculæ, subglaucescentes, lineis nonnullis transversis subundulatis atris; posticæ nigro-cinereæ, margine antico fasciisque duabus albidis, linea atra angulosa submarginali.*

Female. Deep black. Abdomen blackish cinereous, with a deep black crest. Tarsi with whitish bands. Fore wings rather short and broad, with a slight glaucous tinge, which is interrupted by several deep black slightly undulating transverse lines. Hind wings blackish cinereous, whitish in front, and with two whitish bands, the exterior one very incomplete; a deep black zigzag submarginal line. Wings beneath cinereous, with a narrow white band, and with a broad exterior black band, which is much darker in the hind wings than in the fore wings. Length of the body 6 lines; of the wings 14 lines.

a. Australia. From Mr. Argent's collection.

38. Mamestra prolifera.

Fœm. *Ferrugineo-fusca; abdomen cinereum; alæ anticæ guttis costalibus punctisque marginalibus testaceis, maculis reniformi et orbiculari indistinctis, macula flava guttaque testacea apud maculam reniformem; posticæ fusco-cinereæ.*

Female. Dark ferruginous-brown. Abdomen cinereous. Fore wings with some testaceous costal dots and some testaceous marginal points; reniform spot and orbicular spot indistinct, the former containing an oblong transverse pale yellow spot, in front of which there is a testaceous dot. Hind wings brownish cinereous. Length of the body 6 lines; of the wings 16 lines.

New South Wales. In Mr. Saunders' collection.

This species much resembles *M. nigerrima*, and, like it, is as nearly allied to *Apamea* as to *Mamestra*.

39. MAMESTRA IGNOBILIS.

Fœm. *Cinerea; caput albidum; palpi apice albidi; thorax et alæ anticæ fusco conspersa; hæ lineis transversis undulatis aut angulosis fuscis; posticæ basi pallidiores.*

Female. Cinereous. Head whitish. Palpi with whitish tips. Thorax and fore wings sprinkled with brown. Fore wings with brown transverse undulating or zigzag lines. Hind wings paler towards the base. Length of the body 6 lines; of the wings 16 lines.

a. New Holland. Presented by Major-General Hardwicke.

New Zealand.

40. MAMESTRA COMMA.

Fœm. *Nigro-fusca; abdomen cinereum; alæ anticæ lineis transversis angulosis subobsoletis nigris, macula orbiculari parva rotunda testacea nigro marginata, reniformi ex parte testacea strigaque alba attenuata conjunctis; posticæ cinereo-fuscæ, ciliis pallidioribus.*

Female. Blackish brown. Abdomen cinereous. Fore wings with very indistinct zigzag transverse black lines; orbicular spot small, round, testaceous, bordered with black; reniform spot partly testaceous, partly covered by a white mark, which is curved and attenuated at one end. Hind wings cinereous-brown, with paler ciliæ. Length of the body 6 lines; of the wings 15 lines.

a. New Zealand. From Mr. Churton's collection.

Genus 6. CONDICA.

Fœm. Corpus robustum. Proboscis mediocriter longa. Palpi ad verticem ascendentes; articulus 3us cylindricus, 2i dimidio fere longior. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus quatuor longissimis. Alæ mediocriter latæ, apud costam rectæ, apice rotundatæ, margine exteriore vix obliquo aut denticulato.

Female. Body stout. Proboscis moderately long. Palpi ascending to the vertex; third joint cylindrical, full half the length of the second. Antennæ simple, more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four very long spurs. Wings moderately

broad. Fore wings straight in front, somewhat rounded at the tip hardly oblique or denticulated along the exterior border; first second and third inferior veins contiguous at the base; fourth moderately remote.

This species, as regards the palpi, approaches the second group of *Noctuites*, but in other characters is closely allied to *Mamestra* and the species here described much resembles *M. arctica*.

1. Condica palpalis.

Mas. *Cana; caput ferrugineum; thorax antice ferrugineus postice ferruginea conspersus; abdomen fusco-cinereum, subcristatum; alæ anticæ ferrugineæ, cano conspersæ, margine interiore maculisque reniformi, orbiculari et marginali canis ciliis subtestaceis ferrugineo conspersis; posticæ pallide fuscæ ciliis albidis.*

Male. Hoary. Head and fore part of the thorax ferruginous hinder part of the latter with ferruginous specks. Abdomen brownish cinereous, slightly crested. Fore wings ferruginous mostly hoary along the interior border, with a hoary spot on the exterior border, and with some hoary speckles elsewhere; the discal ringlets also hoary; ciliæ slightly testaceous, with ferruginous speckles. Hind wings pale brown, with whitish ciliæ. Length of the body 7 lines; of the wings 16 lines.

a ——— ? From Mr. Children's collection.

Genus 7. DASYGASTER.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, pilosi, caput paullo superantes; articulus 3us cylindricus, 2 triente non brevior. Antennæ corporis dimidio multo longiores Abdomen latum, plus minusve cristatum, subtus pilosissimum Pedes pilosi, breviusculi; tibiæ posticæ calcaribus quatuor brevius culis. Alæ mediocriter latæ; anticæ apud costam vix convexæ apice subangulatæ, margine exteriore subobliquo subrotundato.

Dasygaster, *Guén. Noct.* i. 201.

Body stout. Proboscis moderately long. Palpi porrect, pilose extending a little beyond the head; third joint cylindrical, about one-third of the length of the second. Antennæ much more than half the length of the body. Abdomen broad, more or less crested, very hairy beneath. Legs pilose, rather short; hind tibiæ with four

rather short spurs. Wings moderately broad. Fore wings hardly convex in front, slightly angular at the tips; exterior border slightly oblique and slightly rounded; first, second and third inferior veins approximate; fourth moderately remote. *Male.*—Antennæ stout, setose-crenulate.

1. Dasygaster Hollandiæ.

Murina; abdomen cinereum; alæ anticæ annulis reniformi et orbiculari lineisque transversis incompletis angulosis albidis nigricante marginatis; posticæ fusco-cinereæ, ciliis albidis, subtus albidæ gutta discali margineque latissimo fuscis.

Dasygaster Hollandiæ, *Guén. Noct.* i. 201, 319.

Australia.

2. Dasygaster leucanioides.

Var.? *Rufescens; palpi cinerei; alæ anticæ venis cinereis albo punctatis, gutta alba apud venæ medianæ apicem bene determinata; posticæ fuscæ, ciliis pallidis, subtus cinereæ fusco conspersæ et marginatæ.*

Dasygaster leucanioides, *Guén. Noct.* i. 202, 320.

Male. Reddish. Antennæ and palpi pale cinereous, the former stout, crenulate. Veins of the fore wings dark gray, with white marks, of which, the most distinct one is at the tip of the median vein. Hind wings brown, with paler ciliæ; under side pale cinereous, sprinkled with brown and with dark brown borders. Length of the body 7 lines; of the wings 16 lines.

a. Tasmania. Presented by Morton Allport, Esq.

3. Dasygaster epundoides.

Abdomen valde cristatum; alæ anticæ obscure nigræ, cinereo conspersæ, strigis lanceolatis atris guttisque flavo-albis submarginalibus, gutta apud venam medianam flavo-alba, margine exteriore denticulato; posticæ nigricantes, ciliis cinereis.

Dasygaster epundoides, *Guén. Noct.* i. 202, 321.

Australia.

4. DASYGASTER PUNCTIVENA.

Cinereo-nigra; abdomen cinereum; alæ anticæ lineis transversis angulosis strigisque exterioribus nigris, lituris basalibus fasciaque exteriore guttulari testaceis, maculis reniformi et orbiculari indistinctis, illa ex parte testacea; posticæ fuscæ, antice cinereæ, ciliis ex parte albidæ.

Cinereous-black. Abdomen cinereous. Fore wings with black zigzag transverse lines, and with exterior black streaks; some testaceous marks towards the base, and an exterior band of testaceous dots; reniform spot and orbicular spot indistinct, the former partly testaceous. Hind wings brown, cinereous in front; cilia partly whitish. Length of the body 6 lines; of the wings 16 lines.

a. Tasmania. Presented by W. W. Saunders, Esq.

Genus 8. ERIOPYGA.

Mas. Corpus vix robustum. Frons rotundata. Proboscis breviuscula. Palpi ascendentes; articulus 2us subrectus; 3us brevissimus. Antennæ sat longæ, pubescentes. Thorax hirsutus. Abdomen alas posticas sat superans, apice densissime lanuginoso-pilosum. Alæ sat angustæ.

Eriopyga, *Guén. Noct.* i. 203.

Male. Body hardly stout. Front rounded. Proboscis rather short. Palpi ascending; second joint almost straight; third very small. Thorax hirsute. Abdomen extending some distance beyond the hind wings, with a large mass of woolly hairs at the tip. Legs of moderate thickness, not very pilose; spurs of hind tibiæ moderately long. Wings rather narrow.

1. ERIOPYGA PUNCTULUM.

Fulvo-rufescens; alæ anticæ lituris indistinctis, dimidio basali margineque exteriore nigricantibus, maculis reniformi et orbiculari nigro marginatis, illa puncto albo; posticæ nigro-cinereæ, subtus flavescentes.

Eriopyga punctulum, *Guén. Noct.* i. 203.

Brazil.

Genus 9. APAMEA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, porrecti, pilosi; articulus 3us longi-conicus, 2i triente non brevior. Antennæ corporis dimidio multo longiores. Abdomen alas posticas perpaullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo. *Mas.*—Antennæ crenulatæ.

Apamea, *Ochs. Syst. Gloss. Schmett. von Eur.* iv.
Apamea, p., *Treit.; Dup.; Boisd.*
Mamestra, p., *Meig.*
Hama, p., Apamea, p., Hadena, p., *Steph.*
Oxygia, p., Exarnis, p., Raphia, p., Astrapetis, p., Polia, p., Mamestra, p., Calliergis, p., Diataraxia, p., et Parastichtis, p., *Hübn. Verz. Schmett.*
Luperina, p., *Boisd.; Guén.*
Hydræcia, p., *Guén. Ann. Soc. Ent. Fr.* x. 251.
Polia, p., *Herr.-Schæff.*

Body stout. Proboscis moderately long. Palpi stout, porrect, pilose; third joint elongate-conical, about one-third of the length of the second. Antennæ much more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins near each other; fourth moderately remote.

Male. Antennæ crenulate.

Europe.

A. Antennæ *maris* vix crenulatæ.
  A. Alæ anticæ fuscæ.
    A. Alæ anticæ non plagiatæ.
      a. Alæ anticæ linea basali nigra. - basilinea, *Wien. Verz.*
      b. Alæ anticæ linea nulla basali nigra.
        i. Alæ longiores.
          * Vena mediana non alba.
            † Alæ anticæ lineis transversis albidis. gemina, *Hübn.*
            †† Alæ anticæ lineis transversis non albidis. unanimis, *Hübn.*
          ** Vena mediana alba. - leucostigma, *Hübn.*
        ii. Alæ breviores. - - - - - oculea, *Linn.*

B. Alæ anticæ plagiatæ. - - - ophiogramma, *Esp.*
B. Alæ anticæ cinereæ. - - - - connexa, *Bork.*
B. Antennæ *maris* distincte crenulatæ.
A. Alæ anticæ cinerascente testaceæ. - testacea, *Wien. Verz.*
B. Alæ anticæ cervinæ, fusco variæ. - Dumerilii, *Dup.*
C. Alæ anticæ fuscæ, nigricante variæ. - Desyllesi, *Boisd.*

1. Apamea basilinea.

Fusca; abdomen cinerascens; alæ anticæ lineis transversis undulatis nigro-fusco ex parte marginatis, annulis duobus conjunctis unoque posteriore nigris; posticæ cinereæ, basi pallidiores.

——— ———, *Engr. Pap. d'Eur.* 414?
Phalæna-Noctua basilinea, *Gmel. ed. Syst. Nat.* i. 5, 2567, 1143.
Noctua basilinea, *Wien. Verz.* 78, 36, 12. *Fabr. Mant. Ins.* ii. 183, 305; *Ent. Syst.* iii. 2, 125, 376. *Esp. Schmett.* iv. pl. 146, f. 1. *Bork. Eur. Schmett.* iv. 510, 203. *Hübn. Samml. Eur. Schmett.* pl. 91, f. 427. *Haw. Lep. Brit.* 95. *Dup. Hist. Nat. Lep. Fr.* vii. pl. 101, f. 4. *Freyer, Beitr.* pl. 29.
Noctua nebulosa, *View. Schmett.* 84, pl. 1, f. 6.
Noctua (Mamestra) basilinea, *Meig. Syst. Besch.* iii. 137, 101, pl. 104, f. 5.
Ogygia basilinea, *Hübn. Verz. Schmett.* 225, 2253.
Luperina basilinea, *Boisd. Ind. Méth.* 113, 892.
Apamea basilinea, *Treit. Schmett.* v. 110, 11. *Guén. Noct.* i. 206, 323.
Hama basilinea, *Steph. Ill. Brit. Ent. Haust.* iii. 5. *Westw. & H. Brit. Moths*, i. 170, pl. 35, f. 7, 8.
Polia basilinea, *Herr.-Schæff. Eur. Schmett.* ii. 269, 266.
Polia insueta, *Herr.-Schæff. Eur. Schmett.* ii. 268, 265, pl. 96, f. 491.

a—g. England. From Mr. Stephens' collection.
h—k. England.
—o. Europe. From M. Becker's collection.
p, q. ———?

2. Apamea connexa.

Pallide cinerea; abdomen cristis nigricantibus; alæ anticæ annulis tribus discalibus, plaga postica, guttis costalibus strigulisque marginalibus nigricantibus; posticæ cinereo-fuscæ obscuriores, ciliis pallidioribus.

——— ———, *Engr. Pap. d'Eur.* 351, a, b.
Noctua connexa, *Bork. Eur. Schmett.* iv. 148.

Apamea connexa, *Treit. Schmett. Eur.* ii. 105; *Suppl.* x. 114. *Guén. Noct.* i. 206, 325.
Luperina connexa, *Boisd. Ind. Méth.* 116, 900. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 215, pl. 68.
Noctua pabulatricula, *Brahm, Ins. Kal.* 275. *Scriba, Beit. Ins. Gesch.* iii. pl. 18, f. 3.
Noctua elota, *Hübn. Eur. Schmett. Noct.* f. 462.
Raphia connexa, *Hübn. Verz. Schmett.* 212, 2118.
Hama connexa, *Steph. Ill. Brit. Ent. Haust.* iii. 6. *Westw. & H. Brit. Moths*, i. 171, pl. 35, f. 10.
Hadena connexa, *Herr.-Schæff. Eur. Schmett.* ii. 282, 315.

a—c. England. From Mr. Carter's collection.
d. England. From Mr. Chant's collection.
e—m. England. From Mr. Stephens' collection.
n, o. Europe. From M. Becker's collection.

3. Apamea gemina.

Cinereo-fusca; abdomen cinereum; alæ anticæ nigro-fusco subnebulosæ, ocellis duobus discalibus fasciisque nonnullis angustis variis sordide albidis nigro marginatis; posticæ cinereæ, margine fuscescente.

Var. *Alæ anticæ striga postica basali, plaga discali maculisque duabus marginalibus nigro-fuscis.*

——— ———, *Engr. Pap. d'Eur.* 476, c.
Noctua satura, *Bork. Eur. Schmett.* iv. 377.
Noctua gemina, *Hübn. Samml. Eur. Schmett.* pl. 102, f. 482. *Frey. Neu. Beit. Schmett.* i. 50, pl. 28.
Hadena gemina, *Ochs. Treit. Schmett. Eur.* i. 345; *Suppl.* x. 47.
Luperina gemina, *Boisd. Ind. Méth.* 115, 893.
Noctua remissa, *Hübn. Schmett. Eur. Noct.* pl. 90, f. 423.
Astrapetis remissa, *Hübn. Verz. Schmett.* 219, 2187.
Astrapetis satura, *Hübn. Verz. Schmett.* 219, 2192.
Astrapetis gemina, *Hübn. Verz. Schmett.* 219, 2193.
Noctua oblonga, *Haw. Lep. Brit.* 188.
Noctua obscura, *Haw. Lep. Brit.* 189.
Polia gemina, *Hübn. Verz. Schmett.* ii. 274, 283.
Polia remissa, *Hübn. Verz. Schmett.* ii. 274, 282.
Mamestra? furva, *Steph. Ill. Brit. Ent. Haust.* ii. 191.
Hadena remissa, *Steph. Ill. Brit. Ent. Haust.* ii. 181. *Westw. and H. Brit. Moths*, i. 162, pl. 33, f. 2.
Hadena oblonga, *Steph. Ill. Brit. Ent. Haust.* ii. 182.

Hadena obscura, *Steph. Ill. Brit. Ent. Haust.* ii. 184.
Noctua anceps, *Dup. Hist. Nat. Lép. Fr.* vii. 109, pl. 107, f. 5.
Noctua submissa, *Dahl.*
Apamea gemina, *Guén. Noct.* i. 208, 328.
Polia gemina, *Herr.-Schæff. Schmett. Eur.* ii. 274, 283.

a—r. England. From Mr. Stephens' collection.
s—v. England.
u—z. Europe. From M. Becker's collection.
aa. ———?

4. Apamea unanimis.

Cervino-fusca; abdomen cinereum; alæ anticæ strigis basalibus et discalibus, lineis transversis undulatis guttisque marginalibus nigris, annulis reniformi et orbiculari albis incompletis; posticæ cinereo-albidæ, venis margineque fuscescentibus, ciliis albidis.

Noctua unanimis, *Hübn. Samml. Eur. Schmett. Noct.* pl. 120, f. 556. *Freyer, Neu. Beit. Schmett.* iv. pl. 371; *Ent. Zeit. Stett.* ii. 96.
Apamea unanimis, *Treit. Schmett. Eur. Suppl.* x. 62. *Steph. Ill. Brit. Ent. Haust.* iii. 9. *Guén. Noct.* i. 290, 329.
Luperina unanimis, *Boisd. Ind. Méth.* 115, 894.
Noctua secalina, *Haw. Lep. Brit.* 139, 210.
Apamea secalina, *Steph. Ill. Brit Ent. Haust.* iii. 8. *Westw. & H. Brit. Moths*, i. 178, pl. 37, f. 6.
Mamestra unanimis, *Hübn. Verz. Schmett.* 214, 2137.
Polia unanimis, *Herr.-Schæff. Schmett. Eur.* ii. 273, 281.

a—f. England. From Mr. Stephens' collection.
g—h. England.
i, j. Europe. From M. Becker's collection.

5. Apamea ophiogramma.

Albida; caput nigro varium; palpi supra, antennæ pedesque nigra; thorax nigro fasciatus; tarsi albo-cincti; alæ anticæ cervinæ albo variæ, nigro punctatæ, fascia undulata exteriore fusca, maculis duabus apud marginem exteriorem plagaque maxima costali nigris; posticæ cinereo marginatæ.

——— ———, *Engr. Pap. d'Eur.* 529, a, b.
Noctua ophiogramma, *Esp. Schmett.* iv. pl. 182, f. 2. *Hübn. Samml. Eur. Schmett. Noct.* pl. 76, f. 355. *Dup. Hist. Nat. Lép. Fr.* iv. 135, pl. 109. *Frey. Neu. Beit. Schmett.* i. pl. 75, f. 3

Luperina ophiogramma, *Boisd. Ind. Méth.* 115, 896.
Noctua biloba, *Haw. Lep. Brit.* 135, 209.
Calliergis ophiogramma, *Hübn. Verz. Schmett.* 244, 2428.
Apamea ophiogramma, *Treit. Schmett. Eur.* v. 2, 91, 3; *Suppl.* x. 66. *Steph. Ill. Brit. Ent. Haust.* iii. 11. *Westw. & H. Brit. Moths*, i. 178, pl. 37, f. 10. *Guén. Noct.* i. 209, 331.
Noctua (Apamea) ophiogramma, *Meig. Syst. Besch.* iii. 148, 119, pl. 105, f. 4.
Polia ophiogramma, *Herr.-Schæff. Schmett. Eur.* ii. 275, 287.

e—g. England. From Mr. Stephens' collection.
h—j. England.
k, a. Europe. From M. Becker's collection.

6. Apamea leucostigma.

Cervino-fusca; abdomen cinereum; alæ anticæ maculis reniformi et orbiculari testaceo marginatis, vena mediana alba, fascia lata exteriore pallide cervina; posticæ cinereæ.

———, *Engr. Pap. d'Eur.* 389, a—c.
Noctua leucostigma, *Hübn. Samml. Eur. Schmett. Noct.* pl. 80, f. 375.
Noctua fibrosa, *Hübn. Samml. Eur. Schmett: Noct.* pl. 82, f. 385. *Dup. Hist. Nat. Lép. Fr.* iv. 132, pl. 109.
Diataraxia fibrosa, *Hübn. Verz. Schmett.* 219, 2196.
Apamea fibrosa, *Steph. Ill. Brit. Haust.* iii. 7. *Westw. & H. Brit. Moths*, i. 176, pl. 37, f. 1, 2. *Guén. Noct.* i. 210, 332.
Noctua lunina, *Haw. Lep. Brit.* 134, 209.
Apamea leucostigma, *Treit. Schmett. Eur.* ii. 331.
Hydræcia fibrosa, *Guén. Ann. Soc. Ent. Fr.* x. 237.
Luperina leucostigma, *Boisd. Ind. Méth.* 115, 897.
Hydræcia leucostigma, *Steph. Cat. Brit. Lep.* 86.

a. England. Presented by S. Stevens, Esq.
b. England. Presented by — Harrison, Esq.
c—i. England. From Mr. Stephens' collection.
j, k. England.
l. Europe. From M. Becker's collection.

7. Apamea oculea.

Cinereo-ferruginea; abdomen subtestaceum; alæ anticæ lineis transversis plurimis flexuosis fuscis, litura discali transversa alba nigro interlineata, punctis apud venas exteriores nigricantibus; posticæ cinereo-testaceæ, margine obscuriore.

Var. *Litura discalis testacea, linea nigricante.*

——— ———, *Engr. Pap. d'Eur.* 393, a—c.

Phalæna-Noctua oculea, *Linn. Faun. Suec.* 1215. *Gmel. ed. Syst. Nat.* i. 5, 2574, 1169.

Noctua oculea, *Illig. Mag. Ins.* 223. *Fabr. Sp. Ins.* ii. 238, 139; *Mant. Ins.* ii. 179, 283; *Ent. Syst.* iii. 2, 116, 350. *Haw. Lep. Brit.* 141.

Noctua secalis, *Wien. Verz.* 78, 17.

Noctua nictitans, *Esp. Schmett.* pl. 126, f. 6. *Hübn. Eur. Schmett. Noct.* pl. 135, f. 619.

Noctua didyma, *Esp. Schmett.* pl. 126, f. 7. *Bork. Eur. Schmett.* iv. 465, 185.

Noctua leucostigma, *Esp. Schmett.* iv. pl. 159, f. 7.

Noctua Secalina, *Hübn. Eur. Schmett. Noct.* pl. 80, f. 97; pl. 89, f. 420; pl. 135, f. 619, 620. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 100, f. 5.

Noctua lamda, *View.? T. V.* ii. 81.

Noctua lugens, *Marsh. Haw. Lep. Brit.* 212.

Noctua I-niger, *Haw. Lep. Brit.* 211.

Noctua furca, *Haw. Lep. Brit.* 209.

Noctua rava, *Haw. Lep. Brit.* 137, 209.

Apamea didyma, *Treit. Schmett.* v. 2, 86, 2. *Steph. Ill. Brit. Ent. Haust.* iii. 8.

Apamea oculea, *Steph. Ill. Brit. Ent. Haust.* iii. 9. *Westw. & H. Brit. Moths*, i. 177, pl. 37, f. 7—9. *Guén. Noct.* i. 210, 333.

Apamea I-niger, *Steph. Ill. Brit. Ent. Haust.* iii. 10.

Apamea furca, *Steph. Ill. Brit. Ent. Haust.* iii. 10.

Parastichtis didyma, *Hübn. Verz. Schmett.* 213, 2121.

Parastichtis vilis, *Hübn. Verz. Schmett.* 213, 2122.

Noctua (Apamea) didyma, *Meig. Syst. Besch.* iii. 147, 118, pl. 106, f. 11.

Luperina didyma, *Boisd. Ind. Méth.* 115, 895.

Polia didyma, *Herr.-Schæff. Schmett. Eur.* ii. 274, 285.

Polia moderata, *Herr.-Schæff. Schmett. Eur.* ii. 274, 286, pl. 72, f. 370.

a—sss. England. From Mr. Stephens' collection.
ttt—www. England.
xxx—zzz. Europe. From M. Becker's collection.
aaaa, bbbb. Europe. From Mr. Milne's collection.
cccc. Germany.

8. Apamea testacea.

Cinerascens; alæ anticæ litura basali, annulis duobus discalibus, strigis costalibus lineisque nonnullis transversis undulatis nigricantibus, margine inter venas nigro.

——— ———, *Engr. Pap. d'Eur.* 451, a, b.
Noctua testacea, *Wien. Verz.* 81, 11. *Hübn. Samml. Eur. Schmett. Noct.* f. 139. *Dup. Hist. Nat. Lép. Fr.* iii. 133, pl. 81.
Exarnis testacea, *Hübn. Verz. Schmett.* 225, 2259.
Noctua unca, *Haw. Lep. Brit.* 96, 194.
Noctua lunato-strigata, *Haw. Lep. Brit.* 97, 194.
Noctua X-notata, *Haw. Lep. Brit.* 98, 194.
Hadena testacea, *Treit. Schmett. Eur.* ii. 107.
Luperina testacea, *Boisd. Ind. Méth.* 113, 869. *Guén. Noct.* i. 182, 282.
Hama testacea, *Steph. Ill. Brit. Ent. Haust.* iii. 5. *Westw. & H. Brit. Moths*, i. 171, pl. 36, f. 9.
Polia testacea, *Herr.-Schæff. Eur. Schmett.* ii. 257, 227.

a—ff. England. From Mr. Stephens' collection.
gg—kk. England.
ll—mm. Europe. From M. Becker's collection.

9. Apamea Dumerilii.

Cervina; thorax fusco fasciatus; alæ anticæ disco margineque exteriore fuscescentibus, lineis transversis pallidioribus et nigricantibus, fascia exteriore pallidiore, lituris duabus discalibus albidis; posticæ cinereo-albidæ.

Luperina Dumerilii, *Dup. Hist. Nat. Lép. Fr.* iv. 277, pl. 90, f. 4. *Treit. Schmett. Eur. Suppl.* x. 66. *Boisd. Ind. Méth.* 113, 868. *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 183, 283.
Polia Dumerilii, *Herr.-Schæff. Eur. Schmett.* ii. 257, 228; ii. *Noct.* pl. 21, f. 101.

a, b. Europe. From M. Becker's collection.

10. Apamea Desyllesi.

Statura L. Dumerilii; *alæ anticæ fuscæ, strigis ordinariis obscurioribus, striga fulgurali albido-cinerea, macula reniformi albido nitide scripta, macula orbiculari ovata pallida intus infuscata, extus fusco circumdata oblique posita; posticæ albidæ.*

Luperina Desyllesi, *Boisd. Ind. Méth.* 113, 867. *Guén. Noct.* 183, 284.

West France.

North America.

11. Apamea finitima.

Cervina; thorax pilis nonnullis apice nigris; abdomen testaceum crista nigra; alæ anticæ striga basali, lineis duabus transversis guttisque marginalibus nigris, maculis reniformi et orbiculari maculaque apicali albido-cervinis, illis nigro marginatis posticæ cinereo-albidæ, margine fuscescente, ciliis albidis.

Apamea finitima, *Guén. Noct.* i. 206, 324.

a. New York. Presented by E. Doubleday, Esq.

12. Apamea mactata.

Mas. *Cinerea; thorax fasciis nigris; alæ anticæ nebulis obscurioribus, lituris basalibus et costalibus, lineis transversis incompletis undulatis strigisque marginalibus nigris, annulo reniformi et orbiculari nigris incompletis, posticæ pallide cinereæ, linea margineque fuscescentibus.*

Apamea mactata, *Guén. Noct.* i. 207, 326.

a. Trenron Falls, New York. Presented by E. Doubleday, Esq.

13. Apamea modica.

Albida; alæ anticæ ex parte subcervinæ, lituris costalibus lineolisque exterioribus et marginalibus nigris, plaga discali fusca annulis reniformi et orbiculari nigris incompletis; postic margine fuscescente.

Apamea modica, *Guén. Noct.* i. 207, 327.

a, b. Trenton Falls, New York. Presented by E. Doubleday, Es

14. Apamea Iaspis.

Canescens; thorax atomis nonnullis nigris; alæ anticæ atom nonnullis nigris, basi nigro conspersæ, annulis reniformi orbiculari magnis incompletis lineisque transversis angulati lineaque interrupta marginali nigris, striga brevi lata postic alba.

Apamea Iaspis, *Guén. Noct.* i. 209, 330.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

Africa.

Group 1.

Like the European group.

15. Apamea inferior.

Cervina; thorax linea antica transversa fusca; alæ anticæ maculis reniformi et orbiculari bene determinatis, lineis marginalibus obscurioribus, ciliis longis denticulatis; posticæ cinereæ subdenticulatæ.

pamea inferior, *Guén. Noct.* i. 211, 334.

byssinia.

Group 2.

Alæ anticæ margine exteriore plus obliquo, plus denticulato.

Allied to *Hadena*. Fore wings with the exterior border more lique and more denticulated.

16. Apamea capensis.

Alæ anticæ obscure violaceo-cinereæ, maculis reniformi et orbiculari distinctis nigro lineatis, illa basi albo marginata, hac ovata obliqua; posticæ nigro-cinereæ.

pamea capensis, *Guén. Noct.* i. 213, 337.

ape.

Mauritius.

17. Apamea basimacula.

Ala anticæ pallide cinereæ, striga transversa pallida, macula basali alterisque apicalibus nigris; posticæ fuscæ, ad basim pallidiores.

pamea basimacula, *Boisd. Faune Ent. Mad. Bomb. et Maur. Lép.* 93, 2.

lauritius.

Asia.

18. Apamea undicilia.

Cervina; alæ anticæ pallide cervinæ, fusco conspersæ, lituris costalibus fasciisque duabus fuscis, fascia 1a antice abbreviata, 2a marginali incisa testaceo guttata, maculis reniformi et orbiculari magnis, ciliis fusco lineatis; posticæ pallide cinereæ, marginibus latis fuscescentibus.

Genuinae
Apamides
Apamea

Fawn-colour. Abdomen paler than the thorax. Fore wings pale fawn-colour, speckled with brown, with brown marks along the costa, and with two brown irregular bands; the first shortened in front, partly surrounding the reniform and orbicular spots, and containing a hindward fawn-coloured spot; the second marginal, much indented, and containing testaceous dots; reniform spot and orbicular spot large, of the usual form; ciliæ interlined with brown. Hind wings pale cinereous, with broad brownish borders. Length of the body 5½ lines; of the wings 12 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Australia.

Group 1.

Like the second African group.

19. Apamea saliaris.

Cervino-fusca; abdomen cinereum; alæ anticæ maculæ orbicularis margine, lituris costalibus lunulisque marginalibus nigris, plaga apicali, macula reniformi lineisque undulatis transversis testaceis, fasciis duabus (una exteriore altera marginali) venisque glaucescentibus; posticæ fuscescentes.

Apamea saliaris, *Guén. Noct.* i. 212, 335.

Australia.

20. Apamea spumigera.

Cinerea, thorax fasciis nigricantibus; abdomen cervino-cinereum, lateribus nonnunquam albo-nigroque variis; alæ anticæ plaga maxima discali fasciisque variis nigro-fuscis; costa, basi maculaque diffusa exteriore rufescentibus, fascia repanda exteriore maculisque orbiculari et reniformi albidis, margine exteriore cinereo strigis nigris; posticæ fuscescentes, albo plus minusve variæ.

Apamea spumigera, *Guén. Noct.* i. 212, 336.

Australia.

Edward Newman, Printer, 9, Devonshire Street, Bishopsgate.

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LIST

OF THE

SPECIMENS

OF

LEPIDOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM. Nat. hist.
Dept. of zoology.

BY

FRANCIS WALKER, F.L.S.

PART X.—NOCTUIDÆ.

PRINTED BY ORDER OF THE TRUSTEES.
LONDON, 1856.

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pt. 10.

PREFACE.

The object of the present Catalogue is to give a complete list of all the genera and species of Noctuidæ known to exist in the different collections. The letters *a*, *b*, *c*, &c., after the species, denote the specimens now contained in the British Museum, followed by the *habitat* and the mode in which each of them was obtained, and the absence of these *letters* indicates the species which are desiderata, and therefore desirable to be procured for the collection.

JOHN EDWARD GRAY.

British Museum,
December 29, 1856.

CATALOGUE

OF

LEPIDOPTERA HETEROCERA.

THIRD SERIES.

Fam. NOCTUIDÆ (*continued*).

Genus 10. MIANA.

Corpus mediocriter validum. Proboscis mediocriter longa. Palpi subascendentes; articulus 3us lanceolatus, 2i triente vix brevior. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas perpaullo superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam subrectæ, apice subrotundatæ, margine exteriore subrecto mediocriter obliquo.

Apamea, p., *Treit.; Boisd.; Dup.; Herr.-Schæff.*
Oligia, p., *Hübn. Verz. Schmett.*
Phytometra, p., *Haw.*
Miana, *Steph.; Guén.*
Acosmetia, p., *Steph.*
Caradrina, p., *Boisd.*

Body moderately stout. Proboscis moderately long. Palpi slightly ascending; third joint lanceolate, almost one-third of the

length of the second. Antennæ simple, more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings almost straight in front, somewhat rounded at the tips, moderately oblique and nearly straight along the exterior border; fourth inferior vein hardly remote from the others, which are approximate.

1. Miana strigilis.

Nigro-fusca; abdomen cinereo-fuscum; alæ anticæ cupreo subtinctæ, lineis transversis undulatis duplicatis obscurioribus, fascia angusta undulata submarginali cervina; posticæ cinereo-fuscæ.

——— ———, *Engr. Pap. d'Eur.* 551, a—c.

Phalæna-Noctua strigilis, *Linn. Syst. Nat.* i. 516; *Faun. Suec.* 1199. *Clerck, Icon. Ins.* pl. 9, f. 6. *Gmel. ed. Syst. Nat.* i. 5, 2569, 1151.

Noctua strigilis, *Fabr. Mant. Ins.* ii. 172, 245; *Ent. Syst.* iii. 2, 102, 304. *Esp. Schmett.* pl. 146, f. 1, 2. *Bork. Eur. Schmett.* 81. *Haw. Lep. Brit.* 146, 214. *Dup. Hist. Nat. Lép. Fr.* iv. 12, pl. 101, f. 2.

Noctua præduncula, *Wien. Verz.* 89, 2. *Bork. Eur. Schmett.* iv. 185, 81. *Hübn. Samml. Eur. Schmett. Noct.* pl. 20, f. 95.

Noctua latruncula, *Wien. Verz.* 89, 1. *Bork. Schmett.* iv. 174, 22. *Esp. Schmett.* iv. pl. 146, f. 4—6. *Hübn. Eur. Schmett. Noct.* pl. 20, f. 94. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 101, f. 1.

Noctua furuncula, *Bork. Schmett.* iv 176, 74.

Apamea latruncula, *Treit. Schmett.* v. 1, 98, 7.

Noctua (Apamea) latruncula, *Meig. Syst. Besch.* iii. 146, 115, pl. 95, f. 10; pl. 105, f. 6.

Noctua meretricula, *Bork. Eur. Schmett.* iv. 187.

Noctua ærata, *Esp. Schmett.* iv. pl. 146, f. 4—6.

Noctua latruncula, *Wien. Verz.* 89.

Noctua Æthiops, *Haw. Lep. Brit.* 215.

Noctua (Apamea) strigilis, *Meig. Syst. Besch.* iii. 214, 338.

Oligia strigilis, *Hübn. Verz. Schmett.* 213, 2126.

Oligia latruncula, *Hübn. Verz. Schmett.* 213, 2124.

Apamea strigilis, *Treit. Schmett.* v. 2, 102, 8. *Boisd. Ind. Méth.* 116, 901. *Herr.-Schæff. Eur. Schmett.* ii. 284, 320.

Apamea latruncula, *Herr.-Schæff. Eur. Schmett.* ii. 284, 321.

Var. *Alæ anticæ rubricatæ, strigis maculisque pallidioribus; posticæ nigro-cinereæ.*

Apamea rubeuncula, *Donzel, Ann. Soc. Ent. Fr.* vii. 430, pl. 12, f. 3, 4. *Herr.-Schæff. Schmett. Eur.* ii. 284, 319, pl. 97, f. 499—501.

Mont-Louis, Eastern Pyrenees.

Var.

——— ———, *Engr. Pap. d'Eur.* 550, b.
Noctua fasciuncula, *Haw. Lep. Brit.* 151, 215.
Miana fasciuncula, *Steph. Ill. Brit. Haust.* iii. 15. *Westw. & H. Brit. Moths*, i. 181, pl. 38, f. 10.

Var.

——— ———, *Engr. Pap. d'Eur.* 549.
Noctua strigilis, *Esp. Schmett.* 146, f. 3.
Miana strigilis, *Steph. Ill. Brit. Ent. Haust.* iii. 12. *Westw. & H. Brit. Moths*, i. 181, pl. 38, f. 2—4. *Guén. Noct.* i. 214, 338.
Miana latruncula, *Steph. Ill. Brit. Ent. Haust.* iii. 13.
Miana æthiops, *Steph. Ill. Brit. Haust.* iii. 13. *Westw. & H. Brit. Moths*, i. 181, pl. 38, f. 4.

e—kkk. England. From Mr. Stephens' collection.
lll—qqq. England.
rrr—vvv. Europe. From M. Becker's collection.
www. Europe. From Mr. Milne's collection.
www. ———?

2. Miana erratricula.

Fusco-cinerea; abdomen pallide cinerascens; alæ anticæ lituris discalibus nigris albisque, strigis costalibus, lineolis marginalibus inter venas punctisque nonnullis nigris; posticæ cinereæ.

——— ———, *Engr. Pap. d'Eur.* 238.
Noctua erratricula, *Hübn. Samml. Eur. Schmett.* 537.
Oligia erratricula, *Hübn. Verz. Schmett.* 213, 2128.
Apamia suffuruncula, *Ochs. Syst.* iv. 76. *Treit. Schmett. Eur.* ii. 97. *Boisd. Ind Méth.* 116, 902.
Noctua literosa, *Haw. Lep. Brit.* 144.
Miana literosa, *Steph. Ill. Brit. Ent. Haust.* iii. 12, pl. 25, f. 1.
Noctua latruncula, *Frey. Neu. Beit. Schmett.* ii. 81, pl. 42.
Miana erratricula, *Guén. Noct.* i. 216, 339.

a—g. England. From Mr. Stephens' collection.

3. Miana furuncula.

Cervina; abdomen testaceum, subcinereum, fasciculis nigricantibus; alæ anticæ fusco transversæ sublineatæ, strigis tribus discalibus abbreviatis nigricantibus, margine exteriore cinereo; posticæ subcinereæ, margine fuscescente.

——— ———, *Engr. Pap. d'Eur.* 550.
Noctua furuncula, *Wien. Verz. V.* 3.
Apamea furuncula, *Treit. Schmett. Eur.* ii. 92. *Boisd. Ind. Méth.* 116, 903.
Miana furuncula, *Guén. Noct.* i. 216, 340.
Noctua bicoloria, *Bork. Eur. Schmett.* iv. 190, 85.
Noctua humeralis, *Haw. Lep. Brit.* 149.
Miana humeralis, *Steph. Ill. Brit. Ent. Haust.* iii. 14. *Westw. and H. Brit. Moths*, i. 180, pl. 38, f. 5—8.
Noctua furuncula, *var.*, *Dup. Hist. Nat. Lép. Fr.* 8.
Noctua victuncula, *Hübn. Eur. Schmett. Noct.* pl. 20, f. 96.
Oligia victuncula, *Hübn. Verz. Schmett.* 213, 2127.
Noctua terminalis, *Haw. Lep. Brit.* 215.
Noctua rufuncula, *Haw. Lep. Brit.* 216.
Apamea suffruncula, *Boisd. Ind. Méth.* 116, 902.
Apamea erratricula, *Herr.-Schæff. Eur. Schmett.* ii. 285, 323.
Miana terminalis, *Steph. Ill. Haust.* iii. 14.
Miana rufuncula, *Steph. Ill. Haust.* iii. 14. *Westw. & H. Brit. Moths*, i. 180, pl. 38, f. 9.
Noctua Pulmonariæ, *Dup. Hist. Nat. Lép. Fr.* iv. 47, pl. 75.
Oligia furuncula, *Hübn. Verz. Schmett.* 213, 2125.
Apamea furuncula, *Boisd. Ind. Méth.* 116, 903. *Herr.-Schæff. Eur. Schmett.* ii. 284, 322.

a, *b*. England. Presented by W. Wing, Esq.
c—ll. England. From Mr. Stephens' collection.
mm—nn. England.
oo—qq. Europe. From M. Becker's collection.

4. Miana bipartita.

Fusca; alæ anticæ fasciis undulatis maculisque cervinis, linea transversa undulata alba apud maculæ reniformis marginem exteriorem; posticæ cinereæ, basi ciliisque pallidioribus.

Apamea bipartita, *Herr.-Schæff. Schmett. Eur.* ii. 285, pl. 35, f. 175.
Miana bipartita, *Guén. Noct.* i. 218, 341.

—ar-ily.

5. Miana captiuncula.

Nigricans; alæ anticæ cervinæ, basi fusco strigatæ, fascia lata media fusca-nigro conspersa albido marginata antice cervino varia, margine exteriore nigricante.

Var. *Alæ anticæ basi nigricantes cervino conspersæ.*

Apamea captiuncula, *Treit. Schmett. Eur.* ii. 96; *Suppl.* x. 66. *Eversm. Faun. Volg-Ural.* 242. *Herr.-Schæff. Schmett. Eur.* ii. 283, 317, pl. 35, f. 173, 174. *Boisd. Ind. Méth.* 116, 904.
Noctua captiuncula, *Dup. Hist. Nat. Lép. Fr.* iv. 282, pl. 117.
Miana captiuncula, *Guén. Noct.* i. 218, 343.,

Styria, South Russia.

a, b. Europe. From M. Becker's collection.

6. Miana signalis.

Ferrugineo-rufa; abdomen cinereum; alæ anticæ gutta discali interiore lineisque tribus transversis exterioribus cinereis, macula discali inter guttam et fascias alba; posticæ cinereæ, basi albidæ.

Apamia signalis, *Treit. Schmett. Eur.* vii. 70; *Suppl.* 149. *Herr.-Schæff. Schmett. Eur.* ii. 283, 316, pl. 35, f. 176, 177. *Boisd. Ind. Méth.* 117, 908.
Noctua signalis, *Frey. Neu. Beit. Schmett.* iv. pl. 360 f. 5. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 529, pl. 90.
Miana signalis, *Guén. Noct.* i. 218, 344.

Hungary.

7. Miana arcuosa.

Testacea; alæ posticæ cinereæ. Fœm.—*Alæ parvæ; anticæ fasciis indistinctis obscurioribus, nigro subconspersæ.*

Phytometra arcuosa, *Haw. Lep. Brit.* 260, 17.
Noctua minima, *Haw. Lep. Brit.* 216, 153.
Acosmetia arcuosa, *Steph. Ill. Brit. Haust.* iii. 123. *Westw. & H. Brit. Moths*, i. 245, pl. 54, f. 7.
Miana arcuosa, *Guén. Noct.* i. 218, 345.
Miana minima, *Steph. Ill. Brit. Haust.* iii. 15,
Noctua Airæ, *Frey. Neu. Beit. Schmett.* ii. pl. 162, f. 1—3.
Apamea Duponchelii, *Herr.-Schæff. Eur. Schmett.* ii. 284, 318, pl. 35, f. 178, 179.

Caradrina Duponchelii, *Boisd. Ind. Méth.* 905. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 307, pl. 28.

This species seems to be nearly allied to *Acosmetia caliginosa*.

a, *b*. England. Presented by E. Doubleday, Esq.
c—*n*. England. From Mr. Stephens' collection.
o—*q*. England.
r. Scotland? From Mr. Foxcroft's collection.

North America.

8. Miana undulifera.

Nigro-cinerea; abdomen pallide cinereum; alæ anticæ lituris basalibus et costalibus lineaque exteriore transversa undulata nigra, lituris basalibus guttisque costalibus testaceis, fascia lata marginali testacea fusco varia, maculis reniformi et orbiculari oblongis obliquis fusco lineatis; posticæ pallide cinereæ, macula discali fasciisque duabus fuscis.

Blackish cinereous. Abdomen pale cinereous. Fore wings with blackish marks towards the base and along the costa, and with a black exterior undulating transverse line; some testaceous marks near the base, and some dots of the same hue along the costa, and a broad testaceous brown varied marginal band; orbicular and reniform spots oblong, oblique, each enclosing a brown ringlet. Hind wings pale cinereous, with a brown discal spot and two exterior brown bands. Length of the body 4 lines; of the wings 10 lines.

a. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

South America.

9. Miana subrubens.

Palpi subrufescentes; antennæ simplices; pedes validi, longi; alæ anticæ fasco-cinereæ, nitentes, apud marginem internum albido-variæ; posticæ albidæ.

Miana subrubens, *Guén. Noct.* i. 219, 346.

Brazil.

Africa.

10. Miana adactricula.

M. furunculæ *similis; alæ anticæ paullo breviores et latiores, testaceo-cinereæ, dimidio basali rufo-fusco, linea transversa media subundulata nigra, macula reniformi guttam nigram fingente, ciliis nigricantibus; posticæ nigro-cinereæ.*

Miana adactricula, *Guén. Noct.* i. 218, 342.

Abyssinia.

Country unknown.

11. Miana invisa.

Mas. *Pallide fusca; thorax fasciis obscurioribus cristaque postica nigricante; abdomen cinereum, cristatum; alæ anticæ gutta basali nigricante, lineis transversis undulatis pallidis fusco marginatis, fascia cervina exteriore punctisque marginalibus obscure fuscis; posticæ cinereæ, ciliis testaceis interlineatis.*

Male. Pale brown. Thorax with darker bands, and with a blackish hind crest. Abdomen cinereous, crested. Fore wings with a blackish discal dot near the base, with transverse undulating pale dark brown-bordered lines, with a fawn-coloured exterior band, and with dark brown marginal points. Hind wings cinereous, with testaceous interlined ciliæ. Length of the body 3½ lines; of the wings 10 lines.

♂. ———♀

Genus 11. CELÆNA.

Corpus mediocriter robustum. Proboscis mediocriter longa. Palpi porrecti, pilosi; articulus 3us lanceolatus, 2i trientis non brevior. Antennæ corporis dimidio longiores. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ mediocriter latæ, non longæ; anticæ apud costam subrectæ, apice angulatæ, margine exteriore convexo subobliquo. *Mas.*—Antennæ subcrenulatæ.

Celæna, *Steph. Ill. Brit. Haust.* ii. 15. *Guén.*
Apamea, p., *Curt.*
Bryophila, p., *Treits.*
Neuria, p., *Herr.-Schæff.*

Body moderately stout. Proboscis moderately long. Palpi porrect, pilose; third joint lanceolate, about one third of the length of the second. Antennæ more than half the length of the body. Thorax very pilose. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings moderately broad, not long. Fore wings nearly straight in front, slightly angular at the tips, slightly oblique, and somewhat convex along along the exterior border. *Male.*—Antennæ slightly crenulate.

Europe.

1. Celæna Haworthii.

Lunula centralis subnigra; alæ anticæ fusco subrubræ nitidæ, vel fusco subnigro et subrubro variatæ, vel fusco violaceæ, vel fusco subnigræ; maculis duabus ordinariis subferrugineis, vel luteo cinereo-rufulis pallidis, vel fere albidis; orbiculari rotunda; reniformi intus subinclinata, inferne extrinsecus projecta quadrata, sæpe venulis duabus albidis externis; maculis externis fusco-nigris sagittatis; alæ posticæ cinereo fuscæ pallide, nitidæ, cinereo-fusco late circumdatæ.

Var. *Minor caput et thoraxe ferruginosa; alæ anticæ fasciis apud marginem exteriorem pallidioribus, macula discali interiore majore, exteriore plus elongata, macula postica magis determinata.*

Apamea Haworthii, *Curt. Brit. Ent.* vi. pl. 260. *De Graslin, Ann. Soc. Ent. Fr.* 2me *Sér.* vi. 58, pl. 1, No. 1, f. 3—6. *Herr.-Schæff. Schmett. Eur.* 467, 1, 68.

Apamea tripuncta, *Curt. Brit. Ent.* vi. 260.

Celæna Haworthii, *Steph. Ill. Brit. Ent. Haust.* iii. 16, pl. 23, f. 3. *Guén. Noct.* i. 220, 347.

Celæna Hibernica, *Steph. Ill. Brit. Ent. Haust.* iii. 17.

Celæna lancea, *Steph. Ill. Brit. Ent. Haust.* iii. 18.

Noctua Morio, *Eversm. Bull. Soc. Imp. Nat. Mosc.* iii. 550.

Noctua erupta, *Frey. Beitr.* v. 150, pl. 472, f. 1, 2.

Neuria Haworthii, *Herr.-Schæff. Eur. Schmett.* ii. 293, 346, pl. 91, f. 467, 468.

a—k. England. From Mr. Stephens' collection.
l, m. Scotland. From Mr. Foxcroft's collection.
n, o. England.

2. Celæna digramma.

Fusca; alæ anticæ radiis 2 albis, altero latiore apice trifido, altero tenuiore apice bifido; punctis nigris inter ramos radiorum serie dispositis; inter radios ipsos macula et lunula alba; apice cinereo ciliatæ; posticæ albescentes apice subumbroso, medio lunula fuscescente.

Noctua digramma, *Fischer, Entomograph. Imp. Russ.* pl. 3, f. 18. *Thon, Archiv.* i. 3 (1828). *Metzner, Ent. Zeit. Stett.* v. 190.
Celæna Haworthii, *var.?*

Desert of Tartary, South Russia.

North America.

A. Alæ anticæ viridi variæ. - - - herbimacula, *Guén.*
B. Alæ anticæ viridi non variæ.
  A. Alæ anticæ rufo variæ.
    A. Alæ anticæ non vittatæ. - - chalcedonia, *Hübn.*
    B. Alæ anticæ vitta albida. - - - festivoides, *Guén.*
  B. Alæ anticæ rufo non variæ.
    A. Alæ anticæ cervinæ.
      a. Alæ posticæ marginatæ. - - - exesa, *Guén.*
      b. Alæ posticæ non marginatæ. - - punctifera, *Walk.*
    B. Alæ anticæ non cervinæ.
      a. Alæ anticæ late fasciatæ. - - - egens, *Walk.*
      b. Alæ anticæ non late fasciatæ.
        i. Alæ posticæ albæ. - - - - Arna, *Guén.*
        ii. Alæ posticæ albidæ aut cinereæ.
          * Alæ anticæ guttis exterioribus albidis. infecta, *Walk.*
          ** Alæ anticæ fascia fusca. - subcedens, *Walk.*
          *** Alæ anticæ lineis transversis albidis. erecta, *Walk.*

3 Celæna festivoides.

Rufescente-cinerea; thorax fascia antica nigra; abdomen canescens; alæ anticæ lineis transversis angulosis incompletis nigris, maculis reniformi et orbiculari pallidis; posticæ canescentes. Mas.—*Pallidior; abdomen valvis apicalibus longissimis luteo cinereoque pilosis; alæ anticæ maculis duabus discalibus nigris aut ferrugineis.* Fœm.—*Obscurior; alæ anticæ maculis duabus discalibus fuscis, macula subapicali pallide cervina.*

Celæna festivoides, *Guén. Noct.* i. 220, 348.

a—e. Florida. Presented by E. Doubleday, Esq.

4. Celæna chalcedonia.

Alæ anticæ angustæ, costam versus carneo-cinereæ, cinereo undulatæ, macula apicali pallido, dimidio postico nigro-cinereo, vitta media vaga alba, guttis marginalibus carneis; posticæ albæ, semihyalinæ, margine cinerascente.

Noctua chalcedonia, *Hübn. Samml. Eur. Schmett. Noct.* i. 404.
Bryophila chalcedonia, *Treit. Schmett. Eur.* i. 74.
Celæna chalcedonia, *Guén. Noct.* i. 221, 350.

North America.

5. Celæna Arna.

Cinerea; thorax linea antica obscuriore; alæ anticæ fusco-cinereæ, lineis transversis duplicatis obscurioribus, striga apud maculam reniformem nigra, macula apicali pallida; alæ posticæ albæ, semihyalinæ, margine cinerascente.

Celæna Arna, *Guén. Noct.* i. 222, 351.

Florida.

6. Celæna exesa.

Cervina; thorax nigro conspersus; abdomen canescens; alæ anticæ ex parte pallidiores, nigro variæ, maculis reniformi et orbiculari pallidis bene determinatis, venis ex parte nigris; posticæ canescentes, margine lato fuscescente.

Celæna exesa, *Guén. Noct.* i. 222, 352.

a, b. Florida. Presented by E. Doubleday, Esq.

7. Celæna herbimacula.

Fuscescens; thorax fasciis undulatis pallidioribus; abdomen basi albidum, apice cervinum; alæ anticæ ex parte sæpissime rufescentes, maculis duabus posticis viridi-luteis, macula reniformi albo marginata viridi-luteo notata; posticæ albæ, margine fuscescente.

Var. *Alæ posticæ fusco-cinereæ.*

Celæna renigera, *Steph. Ill. Brit. Haust.* ii. 16.
Celæna herbimacula, *Guén. Noct.* i. 223, 354.

e—e. Trenton Falls, New York. Presented by E. Doubleday, Esq.
f. Illinois. Presented by E. Doubleday, Esq.
g. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.
h—l. Nova Scotia. From Lieut. Redman's collection.
m. ———?

8. Celæna punctifera.

Mas. *Cinereo-cervina; thorax nigro conspersus; abdomen cinereum, apice cervinum; alæ anticæ lineis transversis angulosis strigisque nigricantibus, lunulis marginalibus nigris, maculis reniformi et orbiculari distinctis ex parte albido marginatis; posticæ cinereæ, basi ciliisque albidis.*

Male. Resembles *Xylina.* Cinereous fawn-colour. Thorax sprinkled with black. Abdomen cinereous, with fawn-coloured hairs at the tip. Fore wings with several blackish streaks and zigzag transverse blackish lines, and with black lunules along the exterior border; orbicular and reniform spots distinct; their borders partly whitish. Hind wings cinereous, whitish at the base and with whitish ciliæ. Length of the bdy 5 lines; of the wings 12 lines.

a. United States. Presented by E. Doubleday, Esq.

9. Celæna infecta.

Fœm. *Murina; abdomen cinereum; alæ anticæ sat angustæ, lituris basalibus obscurioribus, lineis duabus transversis exterioribus e guttis albidis, costa margineque exteriore albido notatis; posticæ cinereæ.*

Female. Mouse-colour. Abdomen cinereous. Fore wings rather narrow, with some darker marks towards the base, and with two exterior transverse lines of minute whitish dots; some whitish marks on the costa and along the exterior border. Hind wings cinereous. Length of the body 4 lines; of the wings 10 lines.

a. Illinois. Presented by E. Doubleday, Esq.

10. Celæna egens.

Mas. *Cana; antennæ fulvæ; thorax linea antica fuscescente; alæ anticæ apud costam fuscescentes, fascia latissima fusco marginata maculas reniformem et orbicularem includente; posticæ cinereæ.*

Male. Hoary. Antennæ tawny. Thorax with a brownish line in front. Fore wings brownish along the costa, with a very broad fawn-coloured band, which is bordered with brown, and contains the reniform and orbicular spots; a third spot near the hind border and towards the base of the wing, rather larger than the orbicular spot. Hind wings cinereous. Length of the body 4½ lines; of the wings 11 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

11. Celæna subcedens.

Fœm. *Cinerea; thorax antice nigro conspersus; alæ anticæ albido-cinereæ, lituris costalibus, marginalibus et apud venas fasciaque fuscis, macula reniformi lata, orbiculari oblonga; posticæ pallide cinereæ marginibus fuscescentibus.*

Female. Cinereous. Thorax speckled with black in front. Fore wings mostly whitish cinereous, with black marks on the costa, on the borders, on the veins, and on a brown band, which divides the reniform from the orbicular spot, and is abbreviated hindward; reniform spot broad, hardly reniform; orbicular spot oblong. Hind wings pale cinereous, with brownish borders; ciliæ whitish. Length of the body 5 lines; of the wings 12 lines.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

12. Celæna erecta.

Mas. *Cinereo-fusca; thorax pilis erectis; alæ anticæ ex parte obscuriores, guttis costalibus lineisque quatuor transversis obliquis subundulatis albidis, maculis reniformi et orbiculari ex parte testaceis albido marginatis, ciliis fuscis; posticæ albidæ, marginibus fuscescentibus.*

Male. Cinereous-brown. Thorax with erect hairs. Abdomen cinereous. Fore wings partly darker brown, with some whitish dots towards the tip of the costa, and with four oblique slightly undulating whitish transverse lines, the submarginal one most distinct; reniform spot and orbicular spot partly testaceous, with whitish borders; ciliæ brown. Hind wings whitish, with brownish borders. Length of the body 6 lines; of the wings 12 lines.

a. East Florida. Presented by E. Doubleday, Esq.

West Indies.

13. Celæna agrotina.

Carnea; thorax antice obscurior, nigro varius; abdomen carneo cinereoque subfasciatum; alæ anticæ postice nigro-cinereæ, inter lineas medianas fusco tinctæ, maculis reniformi et orbiculato distinctis parvis rotundatis, punctis marginalibus carneis; posticæ albæ, subhyalinæ, margine subcinerascente. Mas.—*Abdomen valde depressum.*

Celæna agrotina, *Guén. Noct.* i. 221, 349.

Cuba. Brazil.

South America.

A. Alæ anticæ maculis discalibus albis. - Conchylis, *Guén.*
B. Alæ anticæ maculis nullis discalibus albis.
 A. Alæ posticæ nigro-cinereæ. - - - Nævia, *Guén.*
 B. Alæ posticæ cinereæ.
  A. Alæ anticæ rufescentes, nigro variæ.
   a. Alæ anticæ guttis albidis.
    i. Macula orbicularis alba. - - dislocata, *Walk.*
    ii. Macula orbicularis obsoleta. - - tepens, *Walk.*
   b. Alæ anticæ guttis nullis albidis. - fervens, *Walk.*
  B. Alæ anticæ nigræ, rufo variæ. - Carbunculus, *Moriz.*
 C. Alæ posticæ subferrugineæ. - - - Hylea, *Cram.*

14. Celæna Nævia.

Mas. *Nigro-fusca; alæ anticæ lineis medianis geminatis remotis, parte mediana castaneo fusca, macula orbiculari rotunda nigro varia, reniformi angusta, lineola nigra contigua, macula apicali pallida; posticæ nigro-cinereæ.*

Celæna Nævia, *Guén. Noct.* i. 223, 353.

Brazil.

15. Celæna conchylis.

Mas. *Flavo-purpurascens; alæ anticæ fusco-rufescentes, apud medium violaceo tinctæ, maculis tribus argenteo-albis,* 1*a orbiculari maxima integra maxima subtrigona,* 3*a reniformi flavo interlineata; posticæ sordide albidæ, margine, lunula discali lineaque mediana obscurioribus.*

Celæna conchylis, *Guén. Noct.* i. 223, 355.

Brazil.

16. Celæna dislocata.

Rufo-ferruginea; abdomen cinereum; alæ anticæ lituris costalibus et discalibus lineaque transversa exteriore undulata testaceis, nebula cinerea extus maculam reniformem indistinctam, orbiculari alba, guttis nonnullis costalibus et marginalibus albidis; posticæ cinereæ, marginibus fuscescentibus.

Reddish ferruginous. Abdomen cinereous. Fore wings with testaceous marks along the costa and in the disk, and with an exterior transverse undulating testaceous line; a dark cinereous tinge beyond the reniform spot, which is indistinct; orbicular spot bright white; some whitish costal and marginal dots. Hind wings cinereous, with brownish borders. Length of the body 4 lines; of the wings 10 lines.

a. Venezuela. From Mr. Dyson's collection.

17. Celæna tepens.

Rufescens; abdomen rufo-cinereum; alæ anticæ lineis transversis undulatis indistinctis nigricantibus, guttis costalibus et marginalibus lineaque transversa exteriore albidis, macula orbiculari obsoleta, reniformi maculam testaceam fingente; posticæ cinereæ, ciliis albidis.

Reddish. Abdomen reddish cinereous. Fore wings with indistinct blackish transverse undulating lines, with an exterior whitish transverse line, and with whitish costal and marginal dots; orbicular spot obsolete; a white or testaceous spot occupying the place of the reniform spot. Hind wings cinereous, with whitish ciliæ. Length of the body 5 lines; of the wings 12 lines.

a, b. Venezuela. From Mr. Dyson's collection.

18. Celæna? fervens.

Ferrugineo-rufa; abdomen cinereum; alæ anticæ lituris costalibus, guttis exterioribus lineaque submarginali transversa nigris, maculis reniformi et orbiculari indistinctis; posticæ cinereæ, marginibus obscurioribus.

Ferruginous-red. Abdomen cinereous. Fore wings with some black marks along the costa, with some exterior black dots, and with a black transverse submarginal line; reniform spot and orbicular spot indistinct. Hind wings cinereous, with darker borders. [illegible]th of the body 3½ lines; of the wings 10 lines.

[illegible]uela. From Mr. Dyson's collection.

19 CELÆNA? CARBUNCULUS.

Nigra; abdomen nigricans, lateribus cinereis; alæ anticæ lineis undulatis transversis et macularum discalium marginibus rufescentibus, gutta apud maculam reniformem guttisque marginalibus albis; posticæ pallide cinereæ, macula discali margineque latissimo nigricantibus.

Noctua carbunculus, *Moris, MSS. Herr.-Schæff. Lep. Exot. Sp. Nov.* f. 214.

Venezuela.

Africa.

20. CELÆNA RENISIGNA.

Mas. *Cinereo-fusca; abdomen cinereum; alæ anticæ lineis nonnullis incompletis undulatis transversis nigricantibus, guttis costalibus, macula apicali lineaque transversa interrupta submarginali testaceis, lunulis marginalibus nigris, maculis orbicularibus et reniformi distinctis testaceo nigroque marginatis, hujus margine postico albido; posticæ fuscæ, ciliis albidis.*

Mas. Cinereous-brown. Abdomen more cinereous. Fore wings with some incomplete transverse undulating blackish lines, with some testaceous dots along the costa, with a testaceous apical spot, and with an interrupted testaceous submarginal transverse line; a row of black marginal lunules; orbicular and reniform spots distinct, with testaceous borders, which are partly surrounded with black; reniform spot with a white border hindward. Hind wings brown; ciliæ whitish. Length of the body 4½—5 lines; of the wings 11—12 lines.

♂—♂. South Africa. Presented by Dr. A. Smith.

21. CELÆNA? INDIGNA.

Pallide cervina; thorax fasciis duabus anticis fuscis; abdomen cinereum; alæ anticæ lineis undulatis transversis, macula discali, fascia abbreviata interiore, striga costali subapicali macula apud angulum interiorem guttisque exterioribus fuscis; posticæ cinereæ, macula discali fasciaque tenui obscurioribus.

Apamea indigna, *Herr.-Schæff. Lep. Exot. Sp. Nov.* f. 130.

Cape.

Australia.

22. Celæna florescens.

Fœm. *Cervina; thorax fasciis albidis; abdomen albidum; alæ anticæ subcinereæ, lineis albidis, vitta strigisque exterioribus cervinis, lineis transversis angulosis fuscis, fascia marginali albida, macula orbiculari cervina fusco marginata, reniformi fusca extus albo marginata; posticæ albidæ.*

Female. Fawn-colour. Thorax with whitish bands. Abdomen whitish. Fore wings grayish, with whitish lines, with a fawn-coloured stripe, with exterior fawn-coloured streaks, with some zigzag transverse brown lines, and with a whitish band on the exterior border; orbicular spot fawn-colour, with a brown border; reniform spot brown-bordered, with white on the outer side, and partly bordered with fawn-colour on the inner side. Hind wings whitish. Length of the body 5 lines; of the wings 12 lines.

New South Wales. In Mr. Saunders' collection.

23. Celæna? imparata.

Rufo-fusca; abdomen cinereum; alæ anticæ fusco subvariæ, strigis basali, discali et exterioribus nigris, macula orbiculari, guttam testaceam fingente, reniformi incompleta testacea fusco interlineata; posticæ fuscescentes, basi pallidiores.

Male. Reddish-brown. Abdomen cinereous. Fore wings indistinctly mottled with brown, with a black basal streak, with another traversing the reniform spot, and with some shorter exterior black streaks; orbicular spot almost obsolete, represented by a testaceous dot; reniform spot incomplete, testaceous, interlined with brown. Hind wings brownish, paler towards the base. Length of the body 5 lines; of the wings 12 lines.

Tasmania. In Mr. Saunders' collection.

Country unknown.

24. Celæna? plagiata.

Fœm. *Cervina; thorax fascia antica nigra; abdomen cinereum; alæ anticæ murinæ, basi maculaque magna costali pallide cervinis, margine exteriore obscure cervino, macula orbiculari obsoleta, reniformi cervina fusco marginata, venis fuscis; posticæ cinereæ.*

Female. Somewhat resembling the *Xylinidæ*. Fawn-colour. Thorax with a black band in front. Abdomen cinereous. Fore wings mouse-colour, pale fawn-colour at the base, and with a large pale fawn-coloured costal spot, darker fawn-colour along the exterior border; orbicular spot obsolete; reniform spot fawn-colour, bordered with brown; veins brown. Hind wings cinereous. Length of the body 5 lines; of the wings 12 lines.

In Mr. Saunders' collection.

25. Celæna expuncta.

Pallide cervina; thorax fascia antica fusca; alæ anticæ cinereo variæ, lineis transversis undulatis fuscis, macula apicali testacea, orbiculari et reniformi testaceo marginatis, maculis duabus contiguis obscure fuscis, striga arcuata antica alba; posticæ albidæ, marginibus fuscescentibus.

Pale fawn-colour. Thorax with a brown band in front. Abdomen cinereous. Fore wings partly shaded with gray, with transverse undulating brown lines, and with a testaceous apical spot; orbicular and reniform spots with testaceous borders, each accompanied by a dark brown spot; orbicular spot oblong, and having a spot behind it of the same size and shape and colour; a curved white streak between the reniform spot and the costa. Hind wings whitish, with brownish borders. Length of the body 4 lines; of the wings 10 lines.

In Mr. Saunders' collection.

Genus 12. AMPHIA.

Cirrus frontalis brevis, arctatus. Proboscis valida, mediocriter longa. Palpi breves, validi, pilosi, oblique ascendentes; articulus 3us truncatus, brevissimus. Antennæ sat validæ, subpubescentes. Thorax rotundatus lanuginosus, subhirsutus. Abdomen leve, carinatum, parce pilosum. Pedes longi, parce pilosi. Alæ anticæ subdenticulatæ, lineis maculisque distinctis.

Amphia, *Guén. Noct.* i. 224.

Frontal tuft short, contracted. Proboscis stout, moderately long. Palpi short, stout, pilose, obliquely ascending; third joint truncate, very short. Antennæ rather stout, slightly pubescent. Thorax round, lanuginose, somewhat hirsute. Abdomen smooth, keeled, slightly pilose. Legs long, slightly pilose. Fore wings slightly denticulated, with distinct lines and spots.

1. Amphia subunita.

Thorax antice fulvescens; alæ anticæ viridi-cinereæ, apud medium nigricantes, maculis reniformi et orbiculari cinereis nigro marginatis antice apertis, hac rotunda, illa oblonga angulata, claviformi nigro marginata; posticæ cinereæ.

Amphia subunita, *Guén. Noct.* i. 224, 356.

Cape.

2. Amphia hepialoides.

Caput et thorax anticus fulva; alæ anticæ nigricantes, basi, striga, fasciis duabus maculisque reniformi et orbiculari rufo-fulvis nigro conspersis, orbiculari nigra, pupilla cinerea; reniformi oblonga angulata, claviformi nigra; posticæ nigricantes, marginibus fulvo nebulosis.

Amphia hepialoides, *Guén. Noct.* i. 224, 357.

Abyssinia.

Genus 13. PERIGEA.

Corpus vix robustum. Proboscis mediocriter longa. Palpi longiusculi, subascendentes; articulus 3us longi-conicus, 2i triente non brevior. Antennæ simplices, graciles, corporis dimidio paullo breviores. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longissimis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subconvexo vix obliquo.

Perigea, *Guén. Noct.* i. 225.

Body hardly stout. Proboscis moderately long. Palpi slightly ascending, rather long; third joint elongate-conical, full one-third of the length of the second. Antennæ simple, slender, a little more than half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. Legs slender; hind tibiæ with four very long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, slightly convex and hardly oblique along the exterior border; first, second and third inferior veins approximate to each other; fourth moderately remote.

Europe.

1. Perigea implexa.

Cervina; alæ anticæ fascia lata obscuriore albido marginata, maculas reniformem et orbicularem albido marginatas includente, linea submarginali albida; posticæ pallidiores, margine lato obscuriore.

Noctua implexa, *Hübn. Samml. Eur. Schmett.* iii. *Noct.* f. 414. *Treit. Schmett. Eur. Suppl.* x. 73. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 98, pl. 58, f. 7. *Boisd. Ind. Méth.* 101, 754.

Perigea implexa, *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 229, 369.

Noctua viscosa, *Frey. Neu. Beit. Schmett.* i. pl. 21, f. 3.

Sicily.

2. Perigea Sareptæ.

Alæ anticæ nigro-fuscæ, latæ, dentatæ, nitentes, apud spatium medianum ferrugineo tinctæ; posticæ fusco-cinereæ, vix rufo-tinctæ, lunulis marginalibus nigricantibus.

Perigea Sareptæ, *Boisd. MSS Guén. Noct.* i. 230, 370.

Sarepta.

North America.

3. Perigea xanthioides.

Lutea, rufo varia; abdomen canescens; alæ anticæ guttis plagis ciliisque cinereis; posticæ canescentes aut cinereæ, apud margines rufescentes linea fusca.

Perigea xanthioides, *Guén. Noct.* i. 227, 361.

a, b. Florida. Presented by E. Doubleday, Esq.

4. Perigea infelix.

Fusca; abdomen pallide cinereum; alæ anticæ lineis plurimis transversis angulosis subobsoletis nigricantibus, guttis marginalibus nigris, plaga marginali cervina, maculis orbiculari et reniformi indistinctis; posticæ cinereo-fuscæ, ciliis albidis.

Perigea infelix, *Guén. Noct.* i. 229, 368.

a. Florida. Presented by E. Doubleday, Esq.

5. Perigea vecors.

Cervina; thorax fusco varius; abdomen cinereum; alæ antic fusco variæ, lineolis transversis undulosis strigisque exterior bus nigricantibus, gutta apud maculam reniformem punctisq exterioribus albis; posticæ fusco-cinereæ, ciliis pallidioribu

Perigea vecors, *Guén. Noct.* i. 230, 371.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

Mexico:

6. Perigea abstemia.

Castaneo-fusca; palpi subarcuati, bicolores, articulo 3o sat piloso alæ anticæ denticulatæ, macula discali nigro-fusca, reniforme et orbicularem includente; posticæ denticulatæ, ciliis latis cinereis, ex parte castaneo-fuscis.

Perigea abstemia, *Guén. Noct.* i. 231, 372.

Mexico.

West Indies.

7. Perigea subaurea.

Ferruginosa; thorax nigro conspersus; abdomen canescens; al anticæ fasciis tribus macularibus luteis, litura apud maculam reniformem, guttis costalibus punctisque marginalibus albis posticæ canescentes, fusco marginatæ.

Perigea subaurea, *Guén. Noct.* i. 227, 362.
Perigea Hylea, *var.?*

Antilles, Brazil.

8. Perigea circuita.

Palpi robusti, arcuati, articulo 3o brevi lato; alæ anticæ fuscæ lignicolores, rufo variæ, lineis solitis vix determinatis, veni exterioribus albo aut flavescente punctatis, macula reniformi gutta punctisque tribus albis strigaque flavescente, puncti marginalibus flavescentibus; posticæ ochraceo-albidæ, margin lato nigricante.

Perigea circuita, *Guén. Noct.* i. 227, 363.

Isle St. Thomas.

9. Perigea apameoides.

Fusca; alæ anticæ litura discali lineisque transversis indistinctis undulatis pallidioribus et obscurioribus; posticæ cinerascentes, apud margines fuscescentes.

rigea apameoides, *Guén. Noct.* i. 229, 367.

le St. Thomas.

South America.

Alæ anticæ stramineæ. - - - xylophasioides, *Guén.*
Alæ anticæ obscuriores.
A. Alæ anticæ albo guttatæ. - - - stelligera, *Guén.*
B. Alæ anticæ punctis albis. - - - - sutor, *Guén.*
C. Alæ anticæ macula reniformi albo-punctata. albigera, *Guén.*
D. Alæ anticæ albo non variæ.
A. Tibiæ posticæ non latæ.
a. Alæ anticæ ferrugineæ, croceo fasciatæ. - Hylea, *Cram.*
i. Alæ posticæ testaceo-cinereæ. - furtiva, *Guén.*
ii. Alæ posticæ albidæ, margine fuscescente. turpis, *Guén.*
c. Alæ anticæ nigro-fuscæ. - - - selenosa, *Guén.*
B. Tibiæ posticæ latæ. - - - Caternaultii, *Guén.*

10. Perigea? Hylea.

Crocea; alæ anticæ ferrugineæ, basi strigis anticis posticisque fasciaque exteriore croceis, gutta discali alba; posticæ pallide ferrugineæ.

halæna-Noctua Hylea, *Cram. Pap. Exot.* iv. 48, pl. 312, f. E.

urinam.

11. Perigea xylophasioides.

Flavo-straminea; alæ anticæ denticulatæ, sat latæ, rufescente ex parte tinctæ, macula orbiculari obsoleta, reniformi subobsoleta; posticæ stramineo-albæ, subhyalinæ, punctis marginalibus apiceque nigricantibus.

erigea xylophasioides, *Guén. Noct.* i. 226, 360.

razil.

12. Perigea albigera.

Nigricans; alæ anticæ latiusculæ, subintegræ, lineis maculisque solitis testaceis, reniformi e punctis duobus albis, punctis marginalibus ciliaque testaceis, hac incisuris nigricantibus; posticæ nigricantes, ciliis flavo-albis.

Perigea albigera, *Guén. Noct.* i. 228, 364.

Guadeloupe, Brazil.

13. Perigea stelligera.

Fœm. *Violaceo-fusca; alæ anticæ albo guttatæ, maculis orbicularibus et reniformi flavescentibus, pyriformibus, ciliis flavescentibus, fusco interlineatis; posticæ nigricantes, ciliis flavo-albis.*

Perigea stelligera, *Guén. Noct.* i. 228, 365.

Brazil.

14. Perigea selenosa.

Fœm. *Nigro-fusca; alæ anticæ violaceo-fusco marmoratæ, reniformi maxima maculam albam includente; posticæ nigricantes, ciliis flavo-albis.*

Perigea selenosa, *Guén. Noct.* i. 228, 366.

Brazil.

15. Perigea furtiva.

Fusco-cinereo testacea; alæ anticæ subdenticulatæ, lituris indistinctis, nebula fuscescente inter reniformem et orbicularem; posticæ testaceo-cinereæ, ciliis pallidioribus.

Perigea furtiva, *Guén. Noct.* i. 231, 373.

Brazil?

16. Perigea sutor.

Fusco-cinereo testacea; alæ anticæ subintegræ, lituris indistinctis, punctis albis lunulisque nigris marginalibus; posticæ maris *flavescentes, cinereo late marginatæ, ciliis flavo-albis.*

Perigea sutor, *Guén. Noct.* i. 231, 374.

Brazil.

17. PERIGEA TURPIS.

Rufescente-cervina; thorax lineis transversis fuscis; abdomen cinereum; alæ anticæ lineis transversis undulatis subobsoletis fuscescentibus; posticæ albidæ, margine fuscescente.

Perigea turpis, *Guén. Noct.* i. 232, 375.

Colombia.

18. PERIGEA? CATERNAULTII.

Mas. *Fusca; lignicolor; tibiæ posticæ latæ, calcaribus abbreviatis, anticorum una incrassata; alæ anticæ parte media margineque exteriore obscurioribus, macula reniformi apud medium ferruginea; posticæ albæ, margine postico obscuro.*

Perigea Caternaultii, *Guén. Noct.* i. 233, 378.

Cayenne.

Asia.

19. PERIGEA SPICEA.

Testacea; abdomen albidum; alæ anticæ ex parte fusco nebulosæ, punctis, macula discali plagaque apud angulum interiorem nigricantibus; posticæ albidæ.

Perigea spicea, *Guén. Noct.* i. 226, 358.

Java.

20. PERIGEA TRICYCLA.

Mas. *Alæ anticæ ochraceo-flavæ, auratæ, nebulis punctisque obscure rufis, fascia latissima marginali rufo-fusca, margine interiore cinereo apud angulum interiorem nigricante, reniformi et orbiculari rotundis, annulis duplicatis marginalibus; posticæ nigro-cinereæ.*

Perigea tricycla, *Guén. Noct.* i. 226, 359.

Silhet.

Australia.

21. PERIGEA TONSA.

Flavo-cinerea; abdomen depressum, segmento 2o suberistato; alæ anticæ nigricante conspersæ, maculis lineisque pallidioribus subincarnatis, maculis reniformi et orbiculari parvis subæqualibus cinereo pupillatis; posticæ albidæ, margine cinerascente.

Perigea tonsa, *Guen. Noct.* i. 232, 376.
Australia.

22. Perigea albinasus.

Fœm. *Rufo-fusca, cinereo varia; caput antice album; palpi albi; thorax lineis transversis albidis; abdomen pallide cinereum; pedes albido fasciati; alæ anticæ lineis transversis cinereis, una exteriore duabusque submarginalibus, maculis reniformi et orbiculari obscurioribus ex parte cinereo marginatis; posticæ fuscescentes, basi cinereæ, ciliis albidis.*

Female. Reddish-brown, mingled with cinereous. Head white in front. Palpi mostly white. Thorax with whitish transverse lines. Abdomen pale cinereous. Legs with whitish bands. Fore wings with one exterior and two submarginal cinereous transverse lines; reniform and orbicular spots rather darker than the wing elsewhere; their borders partly cinereous. Hind wings brownish cinereous towards the base; ciliæ whitish. Length of the body 7 lines; of the wings 16 lines.

a. Sydney. Presented by E. Doubleday, Esq.

Country unknown.

23. Perigea decens.

Rufescens; abdomen cinereum, subcristatum; alæ anticæ albo punctatæ, costa margineque exteriore albo guttatis, macula orbiculari subobsoleta, reniformi albo notata, testaceo marginata, linea transversa exteriore angulosa incompleta testacea; posticæ pallide cinereæ, marginibus fuscescentibus, ciliis albidis.

Reddish. Abdomen cinereous, slightly crested. Fore wings with a white point; costa and exterior border with white dots; orbicular spot almost obsolete; a white mark on the reniform spot which has a testaceous border; an incomplete exterior zigzag transverse testaceous line. Hind wings pale cinereous, with brownish borders; ciliæ whitish. Length of the body 5—6 lines; of the wings 12—14 lines.

a—c. ——— ? From Mr. Children's collection.

Addenda.

24. Perigea mobilis.

Mas. *Flavescens; thorax fasciis fuscescentibus; abdomen testaceum; alæ anticæ ferrugineo ex parte nebulosæ, lineis transversis fuscis duplicatis undulatis, orbiculari et reniformi fusco marginatis, hac albido notata, illa obliqua subelliptica; posticæ pallide cinereæ, marginibus obscurioribus, ciliis albidis.*

Male. Yellowish. Thorax with brownish bands. Abdomen testaceous, shining. Fore wings partly shaded with ferruginous; the usual transverse lines double, brown, and undulating; orbicular and reniform spots bordered with brown, the former oblique, nearly elliptical, not half the size of the latter, which is large, and has some white marks on its hinder part. Hind wings pale cinereous, with dark cinereous borders, and whitish ciliæ. Length of the body 5 lines; of the wings 12 lines.

a, b. St. Domingo. From Mr. Tweedie's collection.

25. Perigea nigripalpis.

Mas. *Rufescens; palpi nigri; abdomen cinereum; alæ anticæ lineis transversis nigricantibus undulatis indistinctis, exteriore albido marginata, costa testaceo notata, guttis marginalibus testaceis, orbiculari obsoleta, reniformi rufa vix excavata testaceo marginata; posticæ cinereæ, ciliis pallidis.*

Male. Reddish. Palpi black; third joint about half the length of the second. Abdomen cinereous. Fore wings with the transverse lines blackish, undulating and indistinct, the exterior one with a whitish border; costa with testaceous marks; exterior border with testaceous dots; claviform and orbicular spots obsolete; reniform spot red, distinct, not large, hardly excavated, with a testaceous border. Hind wings cinereous, with paler ciliæ. Length of the body 5 lines; of the wings 12 lines.

a. Venezuela. From Mr. Dyson's collection.

26. PERIGEA ANTICA.

Mas. *Rufescens; thorax antice nigricans; abdomen obscure cinereum; alæ anticæ ferrugineæ, lineis transversis fuscis undulatis indistinctis, costa lituris pallidioribus et nigricantibus, lunulis marginalibus nigris, orbiculari obsoleta; reniformi nigricante pallido marginata; posticæ cinereæ.*

Male. Reddish. Thorax blackish in front. Abdomen dark cinereous. Fore wings ferruginous; transverse lines brown, undulating, indistinct; costa with paler and blackish marks; exterior border with black lunules; claviform and orbicular spots obsolete; reniform distinct, blackish, with a pale border. Hind wings cinereous. Wings beneath dark cinereous. Length of the body 5 lines; of the wings 12 lines.

a. Venezuela. From Mr. Dyson's collection.

Fam. 4. CARADRINIDÆ.

Statura mediocris aut parva. Corpus robustum aut gracile. Proboscis non longa. Palpi breviusculi, sæpissime porrecti; articulus 3us parvus. Antennæ simplices, *maris* nonnunquam serratæ. Abdomen alas posticas non aut perpaullo superans. Pedes validi, aut graciles; tibiæ posticæ calcaribus 4 longis. Alæ breviusculæ, latiusculæ, nonnunquam angustæ; anticæ margine exteriore subobliquo.

Caradrinidæ, *Guén. Noct.* i. 234. *Boisd. Ind. Méth.* 136.
Leucanidæ, p., *Guén. Ann. Soc. Ent. Fr.*
Caradrinidi, p., *Steph. Cat. Brit. Lep.* 116.

Size moderate or small. Body robust or slender. Proboscis of moderate length, or very short. Palpi rather short, most often porrect; second joint small. Antennæ simple, serrated in the males of some species. Abdomen hardly extending beyond the hind wings. Legs moderately stout, sometimes slender; hind tibiæ with four long spurs. Wings rather short and broad, rarely narrow or elongate. Fore wings with the exterior border slightly oblique.

A. Antennæ filiformes, *maris* serratæ. - 1. MERISTIS, *Hübn.*
B. Antennæ simplices.
A. Alæ anticæ longiusculæ.
a. Palpi porrecti aut incumbentes. - 2. HYDRILLA, *Boisd.*
b. Palpi ad frontem applicati. - - 3. MONODES, *Guén.*
B. Alæ anticæ breviusculæ, latiusculæ.
a. Proboscis brevissima. - - 4. ACOSMETIA, *Steph.*
b. Proboscis mediocriter longa.
a. Pedes antici non elongati. - 5. CARADRINA, *Ochs.*
b. Pedes antici longi, graciles. - - 6. AMYNA, *Guén.*

Genus 1. MERISTIS.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, oblique ascendentes; articulus 3us conicus, brevissimus. Antennæ corporis dimidio paullo longiores. Abdomen alas posticas paullo superans. Pedes validi; femora pilosa; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apud costam rectæ, apice vix angulatæ, margine exteriore subobliquo. *Mas.*—Antennæ validæ, serratæ. *Fœm.*—Antennæ graciles, simplices.

Meristis, *Hübn. Verz. Schmett.* 239.
Grammesia, *Steph. Ill. Brit. Ent. Haust.* ii. 151. *Guén. Noct.* i. 235.
Caradrina, p., *Treit.; Boisd.; Guén. Ann. Soc. Ent. Fr.; Curt.*

Body stout. Proboscis moderately long, Palpi stout, pilose, obliquely ascending; third joint conical, less than one-fourth of the length of the second. Antennæ a little more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; femora pilose; hind tibiæ with four long spurs. Wings rather broad. Fore wings straight in front, hardly angular at the tips, slightly oblique along the exterior border; first, second and third inferior veins approximate; fourth moderately remote. *Male.*—Antennæ stout, strongly serrated. *Female.*—Antennæ slender, simple.

1. MERISTIS TRILINEA.

Testaceo aut albido-testacea; alæ anticæ conspersæ, lineis tribus transversis fuscis, margine exteriore obscuriore; posticæ cinereæ, ciliis testaceis. Mas.—*Antennæ luteæ.*

Phalæna (Noctua) Quercicola, *Gmel. ed. Syst. Nat.* i. 5, 2535, 1001.

——— ———, *Engr. Pap. d'Eur.* 344, a—c.

Noctua trilinea, *Wien. Verz.* 84, 5. *Bork. Eur. Schmett.* iv. 700, 307. *Hübn. Samml. Eur. Schmett. Noct.* pl. 43, f. 216. *Haw. Lep. Brit.* 249. *Dup. Hist. Nat. Lep. Fr.* vii. 103, pl. 107, f. 2.

Noctua Quercus, *Fabr. Sp. Ins.* ii. 214, 24; *Mant. Ins.* ii. 138, 314; *Ent. Syst.* iii. 2, 22, 44. *Sulz. Ins.* 74, pl. 36.

Noctua trigrammica, *Esp. Schmett.* iv. pl. 123, f. 6.

Caradrina trilinea, *Treit. Schmett. Eur.* v. 2, 272, 14. *Boisd. Ind. Méth.* 137, 1093.

Noctua (Caradrina) trilinea, *Meig. Handb.* 168, 52; *Syst. Besch.* iii. 123, 73, pl. 101, f. 11.

Noctua bilinea, *Hübn. Eur. Schmett. Noct.* pl. 45, f. 217.

Grammesia trilinea, *Steph. Ill. Brit. Ent. Haust.* ii. 152. *Westw. & H. Brit. Moths*, i. 146, pl. 26, f. 17. *Herr.-Schæff. Eur. Schmett.* ii. 194, 37.

Grammesia bilinea, *Steph. Ill. Brit. Ent. Haust.* ii. 152. *Herr.-Schæff. Eur. Schmett.* ii. 194, 38; ii. *Noct.* pl. 77, f. 398.

Meristis trilinea, *Hübn. Verz. Schmett.* 239, 2376. *Steph. Cat. Brit. Lep.* 117.

Meristis bilinea, *Hübn. Verz. Schmett.* 240, 2377. *Steph. Cat. Brit. Lep.* 117.

Caradrina bilinea, *Boisd. Ind. Méth.* 137, 1094. *Curt. Brit. Ent.* xiv. pl. 651.

Noctua notacula? *Fabr. Mant. Ins.* ii. 138, 35.

Phalæna (Noctua) notacula? *Gmel. ed. Syst. Nat.* i. 5, 2535, 1002.

a, *b*. England. Presented by E. Doubleday, Esq.
c, *d*. England. Presented by J. C. Dale, Esq.
e—*gg*. England. From Mr. Stephens' collection.
hh, *ii*. England. From Mr. Stevens' collection.
jj—*mm*. England.
nn—*oo*. Europe. From M. Becker's collection.

Genus 2. HYDRILLA.

Corpus gracillimum. Caput parvum. Proboscis mediocriter longa. Palpi graciles, porrecti aut incumbentes, caput superantes; articulus 3us conicus, brevissimus. Antennæ graciles, corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes graciles, longiusculi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subangulatæ, margine exteriore vix obliquo.

Hydrilla, *Boisd. Ind. Méth.* 138; *Dup.; Guén. Noct.* i. 236.
Caradrina, p., *Ochs.; Treit.*

Body very slender. Head small. Proboscis moderately long. Palpi slender, porrect or incumbent, extending beyond the head; third joint conical, not more than one-sixth of the length of the second. Antennæ slender, more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs slender, rather long; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, slightly angular at the tips, hardly oblique along the exterior border.

1. Hydrilla palustris.

Cinerea; alæ anticæ stigmatibus ambobus punctiformibus nigris, strigis ambabus denticulatis, linea undulata obsoleta basim versus nigro-cincta.

Noctua palustris, *Hübn. Samml. Eur. Schmett. Noct.* f. 367.
Athetis palustris, *Hübn. Verz. Schmett.* 209, 2089.
Caradrina palustris, *Treit. Schmett. Eur.* ii. 255. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 578, pl. 48.
Hydrilla palustris, *Boisd. Ind. Méth.* 138, 1116. *Guén. Ann. Soc. Ent. Fr.* vi. 236; *Noct.* i. 237, 380. *Herr.-Schæff. Eur. Schmett.* ii. 214, 103; ii. *Noct.* pl. 58, f. 292. *Eversm. Faun. Volg.* 261.
Hydrilla exilis, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842.

Valais, Switzerland. Austria. South Russia.

2. Hydrilla adoleta.

H. palustri *affinis; palpi minus hirti, articulo 3o magis distincto; alæ anticæ ochraceo-cinereæ, nigro conspersæ, lineis duabus medianis vagis, venis apice margineque exteriore obscurioribus; posticæ sordide albidæ, strigis marginalibus cinereis.*

Hydrilla adoleta, *Guén. Noct.* i. 238, 381.

South Russia.

3. Hydrilla obliterata.

Alæ subnitidæ dilute subcinereæ, anticæ fusco irroratæ, striga pone medium punctulata punctisque in costa minutis albidis, litura quadrata obscure fusca inter maculas ordinarias.

Noctua obliterata, *Dalm. MSS.*
Hadena? obliterata, *Zett. Ins. Lapp.* 941, 20.
Hydrilla obliterata, *Boisd. Ind. Méth.* 138, 1117. *Guén. Ann. Soc. Ent. Fr.* vi. 236; *Noct.* i. 238, 382.

Lapland.

Asia.

4. Hydrilla? distracta.

Alæ dilatatæ, nigricante fuscæ, ad marginem externum obscuriores, strigis ordinariis per puncta nigra et adjacentia alba signatis, maculis ordinariis magnis integris nigro impletis, linea interrupta alba terminatis; posticæ nigricantes, lunula media nigra.

Caradrina distracta, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xxi. 3. 217, 9,
Hydrilla? distracta, *Guén. Noct.* i. 239, 383.

Kiachta, E. Siberia.

5. Hydrilla? distensa.

Mas. *Alæ anticæ cinereo-fuscæ, nebulosæ, strigis duabus dentatis nigris, maculis ordinariis nigro-cinctis; alæ posticæ subcinereo-albidæ, pulveratæ, striga externa dentata nigra umbraque extima nigricante.*

Caradrina distensa, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1851, xxiv. No. 2, 633, 20.

Irkoutzk.

Genus 3. ACOSMETIA.

Corpus gracillimum. Proboscis brevissima. Palpi graciles, porrecti, caput superantes; articulus 3us 2i triente æqualis. Antennæ gracillimæ, corporis dimidio longiores. Abdomen alas posticas non superans. Pedes graciles, longiusculi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore mediocriter obliquo.

Acosmetia, *Steph. Ill. Brit. Ent. Haust.* iii. 121; *Guén. Noct.* i. 239.

Athetis, p., *Hübn. Verz. Schmett.* 209.
Anthophila, p., *Treit.*
Hydrilla, p., *Boisd.; Dup.*
Caradrina, p., *Ochs.*

Body very slender. Proboscis very short. Palpi slender, porrect, extending beyond the head; third joint about one-third of the length of the second. Antennæ very slender, rather more than half the length of the body. Abdomen not extending beyond the hind wings. Legs slender, rather long; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, somewhat rounded at the tips, moderately oblique along the exterior border; fourth inferior vein rather remote from the others, which are nearly contiguous.

1. Acosmetia caliginosa.

Rufescente-cinerea; caput thoracisque fascia nigra; abdomen albidum; alæ anticæ lineis duobus transversis angulosis ocellisque duobus intermediis discalibus elongatis albido-nigris; posticæ sordide albidæ, margine cinerascente.

Noctua caliginosa, *Hübn. Samml. Eur. Schmett. Noct.* pl. 100, f. 474.
Athetis caliginosa, *Hübn. Verz. Schmett.* 209, 2090.
Anthophila caliginosa, *Treit. Schmett. Eur.* iii. 286; *Suppl.* x. 148.
Caradrina caliginosa, *Eversm. Faun. Volg-Ural.* 339.
Hydrilla caliginosa, *Boisd. Ind. Méth.* 138, 114. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 341, pl. 31.
Acosmetia caliginosa, *Steph. Ill. Brit. Ent. Haust.* ii. 122. *Guen. Ann. Soc. Ent. Fr.* vi. 236; *Noct.* i. 240, 384.

a, *b*. England. From Mr. Stephens' collection.
c, *d*. England.
e. Europe. From M. Becker's collection.

2. Acosmetia aquatilis.

Mas. *Albo-cinerea, subochracea; posticæ albæ, cinereo ex parte conspersæ.*

Acosmetia aquatilis, *Boisd. MSS. Guén. Noct.* i. 243, 385.
Acosmetia caliginosa, *var.*

Ural District.

Genus 4. MONODES.

Corpus mediocriter robustum. Proboscis breviuscula. Palpi graciles, ascendentes; articulus 3us lanceolatus, 2i trienie æqualis. antennæ graciles, simplices, corporis dimidio multo longiores. Abdomen alas posticas vix superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ anticæ sat angustæ, apud costam vix convexæ, apice rotundatæ, margine exteriore vix obliquo.

Monodes, *Guén. Noct.* i. 240.

Body moderately stout. Proboscis rather short. Palpi slender, ascending to the vertex; third joint lanceolate, about one-third of the length of the second. Antennæ slender, simple, much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Fore wings rather narrow, hardly convex in front, rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins approximate; fourth remote.

1. Monodes nucicolora.

Cervina; abdomen cinerascens; alæ anticæ litura discali pallidiore, macula discali nigra, plaga diffusa nigro-cinerea marginali; posticæ albæ.

Monodes nucicolora, *Guén. Noct.* i. 241, 386.

a. E. Florida. Presented by E. Doubleday, Esq.

Genus 5. CARADRINA.

Corpus robustum aut gracile. Proboscis mediocriter longa. Palpi validi, pilosi, porrecti, caput paullo superantes; articulus 3us brevissimus. Antennæ simplices, sat validæ, corporis dimidio perpaullo longiores. Abdomen alas posticas perpaullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ aut subrotundatæ, margine exteriore subconvexo vix obliquo.

Caradrina, p., *Ochs. Syst. Gloss. Schm. von Eur.* iv.; *Treits.; Boisd.; Dup.*
Caradrina, *Steph.; Guén. Noct.* i. 241.
Caradrina, Elaphria, Athetis, p., et Telmia, *Hübn. Verz. Schmett.*

Body stout or slender. Proboscis moderately long. Palpi stout, pilose, porrect, extending a little beyond the head; third

joint not more than one-fourth of the length of the second. Antennæ simple, rather stout, very little more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rectangular or somewhat rounded at the tips, slightly convex and very slightly oblique along the exterior border; inferior veins much as usual.

Group 1.

Acosmetiæ affinis. Corpus gracile. Alæ latæ, nitentes.

Allied to *Acosmetia*. Body slender. Wings broad, shining.

1. CARADRINA ULIGINOSA.

Cinerea; alæ anticæ stigmate reniformi parvo, orbiculari punctiformi nigerrimo, strigis ambabus, umbra media, linea undulata subrecta testacea utrinque fusco terminata.

Caradrina uliginosa, *Guén. Noct.* i. 243, 387.
Hydrilla uliginosa, *Boisd. Ind. Méth.* 138, 1115. *Herr.-Schæff. Eur.-Schmett.* ii. 213, 102; ii. *Noct.* pl. 58, f. 293, 294.

South Switzerland.

2. CARADRINA LENTA.

Murina; alæ anticæ lineis transversis angulosis fasciisque duabus diffusis guttisque costalibus nigricantibus, linea transversa submarginali pallide murina; posticæ pallide murinæ, macula discali margineque obscurioribus.

Caradrina lenta, *Treit. Schmett. Eur.* ii. 257. *Guén. Ann. Soc. Ent. Fr.* vi. 236; *Noct.* i. 243, 388. *Boisd. Ind. Méth.* 137, 1103. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 305, pl. 28. *Eversm. Faun. Volg-Ural.* 262. *Herr.-Schæff. Eur. Schmett.* ii. 211, 94.
Noctua lenta, *Frey. Beit. Ges. Eur. Schm.* pl. 47. *Geyer, Samml. Eur. Schm.* f. 825.

e—c. Europe. From M. Becker's collection.

Group 2.

Corpus robustum. Pedes validi, pilosi. Alæ anticæ lineis maculisque solitis distinctis, bene determinatis, pallidiore marginatis.

Body stout. Legs stout, pilose. Fore wings with the usual lines and spots distinct and separate, bordered with pale colour.

3. Caradrina Morpheus.

Cervina; abdomen testaceum; alæ anticæ maculis reniformi et orbiculari fasciisque indistinctis aut conspicuis obscurioribus aut nigris; posticæ albidæ, nitentes.

——— ———, *Engr. Pap. d'Eur.* 406.
Phalæna-Noctua Morpheus, *Hüfn. Berl. Mag.* iii. 302.
Phalæna pulla? *Beckw. Linn. Trans.* i. 2, pl. 1, f. 7, 9.
Noctua Sepii, *Sepp, Ins.* iv. pl. 34. *Hübn. Eur. Schmett. Noct.* pl. 34, f. 161. *Dup. Hist. Nat. Lep. Fr.* iii. 52, pl. 75.
Caradrina Morpheus, *Treit. Schmett.* ii. pl. 249. *Steph. Ill. Brit. Ent. Haust.* ii. 157. *Westw. & H. Brit. Moths*, i. 145, pl. 29, f. 13, 14. *Herr.-Schæff. Eur. Schmett.* ii. 210, 9. *Guén. Noct.* i. 244, 390.
Caradrina Sepii, *Steph. Ill. Brit. Ent. Haust.* ii. 158.
Elaphria Sepii, *Hübn. Verz. Schmett.* 230.

a—p. England. From Mr. Stephens' collection.
q—v. England.
u, w. Europe. From M. Becker's collection.

4. Caradrina Alsines.

Testaceo-cervina; abdomen cinereo-cervinum; alæ anticæ fasciis undulatis indistinctis fuscescentibus, maculis reniformi et orbiculari fasciaque exteriore obscurioribus testaceo marginatis, lineis transversis guttularibus nigricantibus; posticæ testaceo-cinereæ, nitentes.

——— ———, *Engr. Pap. d'Eur.* 406, b.
Noctua Alsines, *Bork. Eur. Schmett.* 264. *Hübn. Samml. Eur. Schmett.* 577.

Caradrina Alsines, *Hübn. Verz. Schmett.* 230, 2311. *Treit. Schmett. Eur.* ii. 266? *Dup. Hist. Nat. Lép. Fr.* iii. 63, pl. 76? *Eversm. Faun. Volg-Ural.* 258? *Herr.-Schæff. Eur. Schmett.* ii. 211, 95; ii. *Noct.* pl. 74, f. 379. *Boisd. Ind. Méth.* 137, 1100? *Guén. Ann. Soc. Ent. Fr.* vi. 236; *Noct.* i. 244, 392.

See Bentley, *Entomologist*, 316, for descriptions of the varieties.

a—r. England. From Mr. Stephens' collection.
s, t. Europe. From M. Becker's collection.

5. Caradrina blanda.

Cana; abdomen sordide albidum; alæ anticæ annulis duobus (exteriore elongato transverso) lineisque duabus transversis exterioribus albidis, punctis exterioribus in lineas duas transversas dispositis nonnullisque costalibus nigricantibus; posticæ albidæ, margine sordiusculo.

——— ———, *Engr. Pap. d'Eur.* 406, c—e.
Phalæna (Noctua) blanda, *Gmel. ed. Syst. Nat.* i. 5, 2548, 1066.
Noctua blanda, *Wien. Verz.* 77, 8. *Fabr. Mant. Ins.* ii. 147, 96. *Hübn. Eur. Schmett. Noct.* pl. 34, f. 162.
Caradrina blanda, *Hübn. Verz. Schmett.* 230, 2310. *Dup. Hist. Nat. Lép. Fr.* iii. 55, pl. 75, f. 6. *Boisd. Ind. Méth.* 137, 1098. *Guén. Ann. Soc. Ent. Fr.* vi. 236; *Noct.* i. 245, 393.
Caradrina Taraxaci, *Hübn. Verz. Schmett.* 230, 575. *Boisd. Ind. Méth.* 137, 1099. *Herr.-Schæff. Eur. Schmett.* ii. 211, 97; ii. *Noct.* pl. 74, f. 380.
Noctua Plantaginis, *Hübn. Eur. Schmett. Noct.* f. 576
Noctua Taraxaci, *Hübn. Eur. Schmett. Noct.* f. 575.
Noctua superstes, *Frey. Neu. Beit. Schmett.* 382.

See *Stephens, Cat. Brit. Lep.* p. 117, for other synonyms.

a—c. England. From Mr. Stephens' collection.
d—h. England.
i—m. Europe. From M. Becker's collection.
n—p. Europe.

6. Caradrina ambigua.

Cervina; abdomen pallidum; alæ anticæ maculis reniformi et orbiculari, lineis transversis guttularibus fasciisque obscurioribus pallido marginatis; posticæ testaceo-cinerascentes.

Phalæna-Noctua ambigua, *Gmel. ed. Syst. Nat.* i. 5, 2548, 1067.
——— ———, *Engr. Pap. d'Eur.* 403, a.

Caradrina terrea, *Kinderm*, *Frey. Neu. Beit. Schmett.* iv. pl. 303, f. 3, 4. *Boisd. Ind. Méth.* 137, 1102. *Herr.-Schæff. Eur. Schmett.* ii. 208, 85; ii. *Noct.* pl. 19, f. 90; pl. 79, f. 409. *Guén. Noct.* i. 249, 400.

South Russia.

13. Caradrina aspersa.

Alæ anticæ subcinereo-rufescentes, strigis quatuor obsoletis sinuato dentatis, macula reniformi lunata nigricante, orbiculari nulla vel subnulla.

Caradrina adspersa, *Ramb. Ann. Soc. Ent. Fr.* iii. 385, pl. 8, f. 3. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 316, pl. 29. *Herr.-Schæff. Eur. Schmett.* ii. 210, 93; ii. *Noct.* pl. 89, f. 458. *Boisd. Ind. Méth.* 138, 1109. *Guén. Ann. Soc. Ent. Fr.* vi. 236; *Noct.* i. 249, 401.

Marseilles, Digne.

14. Caradrina fuscicornis.

Alæ anticæ subcinereæ, lineis tribus transversis obsoletis rufescentibus, macula reniformi punctis albis notata in medio rufa; posticæ albæ.

Caradrina fuscicornis, *Ramb. Ann. Soc. Ent. Fr.* i. 286, pl. 9, f. 5. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 318, pl. 29. *Boisd. Ind. Méth.* 138, 1108. *Guén. Noct.* i. 249, 402.

Caradrina Kadenii, var., *Guén. Ann. Soc. Ent. Fr.* vi. 236.

Corsica.

15. Caradrina albina.

Alæ anticæ thorace concolores, lutescente-cinereæ, punctis nonnullis costalibus punctisque tribus lineæ internæ nigris, serie externa flexuosa punctorum fuscorum obsoleta, maculis ordinariis dilute fuscescentibus, rotunda minuta integra, media reniformi, punctulis obsoletis albis terminata; alæ posticæ candidæ.

Caradrina albina, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xxi. 3, 215, 8. *Guén. Noct.* i. 250, 403.

Southern Ural Mountains, Volga District.

16. Caradrina Kadenii.

Albido-cervina; abdomen cinerascens; alæ anticæ guttis costalibus nigris, macula reniformi nigro-fusca; posticæ albæ.

Noctua Kadenii, *Frey. Neu. Beit.* ii. 147, pl. 186. *Fisch. Rosl. Abbild.* 78. pl. 36.

Caradrina Kadenii, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 314, pl. 29. *Boisd. Ind. Méth.* 1107. *Eversm. Faun. Volg-Ural.* 260. *Herr.-Schæff. Eur. Schmett.* ii. 208, 86; ii. *Noct.* pl. 79, f. 408. *Guén. Noct.* i. 250, 404.

South France. Pyrenees. Hungary. South Russia.

17. Caradrina grisea.

Alæ anticæ thorace concolores, e fusco cinereæ, strigis ordinariis per puncta nigra signatis, macula rotunda punctiformi nigra maculaque media reniformi nigro interrupte circumscripta; posticæ albidæ, externe fuscescentes, puncto medio fusco.

Caradrina grisea, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xxi. 3, 215, 7.

Caradrina Kadenii, *var.?*

Ural Mountains, North Orenburg.

18. Caradrina Selini.

Fusco-cinerea; abdomen testaceum; alæ anticæ basi et apud costam albicantes, maculis duabus discalibus nigris emarginatis, exteriore transversa coarctata, venis albidis; posticæ cinerascentes.

Caradrina Selini, *Boisd. Ind. Méth.* 137, 1096. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 576, pl. 48. *Herr.-Schæff. Eur. Schmett.* ii. 210, 92; ii. *Noct.* pl. 19, f. 91. *Guén. Ann. Soc. Ent. Fr.* vi. 236; *Noct.* i. 251, 405.

Valais.

19. Caradrina cubicularis.

Cana; abdomen albidum; alæ anticæ atomis, guttis marginalibus lineisque transversis angulosis subinterruptis nigricantibus; posticæ albæ, margine cinerascente.

Var. *Cinerea; abdomen canescens; alæ anticæ fasciis diffusis fuscescentibus.*

——— ———, *Engr. Pap. d'Eur.* 405, a, b.

Noctua cubicularis, *Wien. Verz.* 726. *Bork. Eur. Schmett.* iv. 212, 97. *Hübn. Samml. Eur. Schmett. Noct.* pl. 89, f. 417. *Haw. Lep. Brit.* 208. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 76, f. 1.

Noctua quadripunctata, *Fabr. Sp. Ins.* ii. 214, 25; *Mant. Ins.* ii. 139, 35; *Ent. Syst.* iii. 2, 22, 46.

Phalæna (Noctua) quadripunctata, *Gmel. ed. Syst. Nat.* i. 5, 2535, 1003.

Noctua segetum, *Esp. Schmett.* iv. pl. 150, f. 4. 5.

Athetis cubicularis, *Hübn. Verz. Schmett.* 209, 2091.

Caradrina cubicularis, *Treit. Schmett.* v. 2, 251, 3. *Steph. Ill Brit. Ent. Haust.* ii. 158. *Westw. & H. Brit. Moths*, i. 145, pl. 29, f. 15. *Boisd. Ind. Méth.* 138, 1111. *Herr.-Schæff. Eur. Schmett.* ii. 209, 87. *Guén. Noct.* i. 251, 406.

Noctua (Caradrina) cubicularis, *Meig. Syst. Besch.* iii. 122, 71, pl. 98, f, 10.

a—r. England. From Mr. Stephens' collection.
s—y. England.
z—aa. Europe. From M. Becker's collection.
bb. ———? Presented by the Entomological Club.

20. Caradrina? ignicola.

Rufescente-cinerea; alæ anticæ annulis fasciisque variis pallidioribus; posticæ pallidæ, lunula fascia margineque cinereis.

Noctua ignicola? *Hübn. Eur. Schmett.* f. 546.

Caradrina ignicola, *Herr.-Schæff. Eur. Schmett.* ii. 212, 100; ii. *Noct.* pl. 88, f. 455.

North Europe?

North America.

Group 1.

Like the first European group.

21. Caradrina tarda.

Fœm. *Cinerea; palporum articulus 2us extus fusco maculatus; alæ anticæ lineis duabus medianis nigris remotis gracillimis, maculis reniformi et orbiculari puncta dua nigra fingentibus, nebula intermedia vix conspicua; posticæ pallidiores.*

Caradrina tarda, *Guén. Noct.* i. 243, 389.
North America.

Group 2.

Like the second European group.

22. CARADRINA MULTIFERA.

Cinerea; thorax nigro conspersus; alæ anticæ nigro conspersæ, lituris costalibus lineisque transversis angulosis nigris, fasciis duabus guttisque marginalibus fuscis, macula orbiculari parva, reniformi magna subfusiformi; posticæ ciliis albidis.

Cinereous. Thorax and fore wings with blackish speckles. Fore wings with black marks on the costa, with blackish zigzag transverse lines, with two brownish bands, and with brown marginal dots; orbicular spot small; reniform spot large, nearly fusiform. Hind wings with whitish ciliæ. Length of the body 5 lines; of the wings 12 lines.

a, *b*. Nova Scotia. From Lieut. Redman's collection.

Group 3.

Like the second European group.

23. CARADRINA GRATA.

Pallide fusca; alæ anticæ lineolis quatuor transversis pallidioribus, 1a, 2a, 3aque medio divisis; posticæ cinereæ basi canæ.

Elaphria grata (Noctua genuina, Agrotis subtilis), *Hübn. Samml. Exot. Schmett.* i. 16, 36, f. 71, 72.

Georgia, Florida.

Africa.

Group 1.

Like the second European group.

24. CARADRINA TORPENS.

Alæ anticæ carneo-cinereæ, nigro conspersæ, lineis duabus medianis sat approximatis bene determinatis, maculis reniformi et orbiculari parvis, punctis nullis marginalibus; posticæ nigro-cinereæ, basi ciliisque pallidioribus, his basi carneo lineatis.

Caradrina torpens, *Guén. Noct.* i. 244, 391.
Abyssinia.

25. Caradrina partita.

Pallide cervina; abdomen pallidissimum; alæ anticæ lineis transversis undulatis fuscescentibus, macula orbiculari obsoleta, reniformi fuscescente incompleta albo guttata; posticæ albidæ.

Pale fawn-colour. Abdomen much paler than the thorax. Fore wings with five or six transverse undulating brownish lines; orbicular spot obsolete; reniform spot brownish, incomplete, with a white dot. Hind wings whitish. Length of the body 5 lines; of the wings 12 lines.

a. Congo. Presented by Sir J. Richardson.

26. Caradrina orbicularis.

Cervina; abdomen pallidum; alæ anticæ lineis nonnullis transversis undulatis fuscescentibus pallido marginatis, maculis reniformi et orbiculari distinctis, hac pallide cervina fusco marginata, illa fuscescente cervino marginata; posticæ albidæ, linea marginali fuscescente.

Fawn-colour. Abdomen much paler than the thorax. Fore wings with several transverse undulating brownish lines, which are mostly interrupted and bordered with pale fawn-colour; reniform spot and orbicular spot distinct, the former brownish with a pale fawn-coloured border, the latter pale fawn-colour with a brown border. Hind wings whitish, with a brownish marginal line. Length of the body 4½—5 lines; of the wings 13—14 lines.

a, b. South Africa. Presented by Dr. A. Smith.

27. Caradrina præterita.

Pallide cervina; alæ anticæ nitentes, lineis duabus transversis indistinctis undulatis obscurioribus, macula reniformi nigricante, orbiculari albido marginata; posticæ albæ, opalinæ.

Pale fawn-colour. Abdomen a little paler than the thorax. Fore wings shining, with two indistinct undulating transverse darker lines, which include the reniform spot and the orbicular spot; the former is mostly blackish, the latter has a whitish border.

Hind wings white, opaline. Length of the body 4 lines; of the wings 12 lines.

a, *b*. South Africa. Presented by Dr. A. Smith.

28. CARADRINA PULVEROSA.

Pallidissime cervina; alæ anticæ lineis transversis angulosis fuscescentibus, linea transversa angulosa submarginali albida, maculis costalibus guttisque marginalibus nigricantibus, maculis reniformi et orbiculari distinctis fuscis, hac parva rotunda, illa angusta; posticæ albæ, opalinæ.

Very pale fawn-colour. Fore wings with zigzag transverse brownish lines, with a submarginal zigzag transverse whitish line, with blackish costal spots, and with blackish marginal dots; reniform spot and orbicular spot distinct, mostly brown, the former narrow, contracted in the middle; the latter small, round. Hind wings white, opaline. Length of the body 5 lines; of the wings 12 lines.

a. Caffraria. From M. Becker's collection.

29. CARADRINA INSIGNATA.

Pallide cervina; alæ anticæ fusco subconspersæ, fasciis nonnullis incompletis fuscescentibus fasciaque submarginali e strigis albidis, maculis reniformi et orbiculari fuscis, hac parva, ciliis albido notatis; posticæ albæ, opalinæ.

Resembles the *Laphygmæ*. Pale fawn-colour. Abdomen paler than the thorax. Fore wings slightly sprinkled with brown; some incomplete brownish bands, and a submarginal band of whitish streaks; reniform spot and orbicular spot brown, the latter small; ciliæ with whitish intervals. Hind wings white, opaline. Length of the body 5 lines; of the wings 12 lines.

a. South Africa. Presented by Dr. A. Smith.

30. CARADRINA TRITURATA.

Pallide cervina; alæ anticæ macula discali guttisque marginalibus fuscis; posticæ albæ, opalinæ, semihyalinæ.

Resembles a *Laphygma*. Pale fawn-colour. Abdomen paler than the thorax. Fore wings with a brown discal spot and with brown dots along the exterior border. Hind wings white, opaline, semihyaline. Length of the body 6 lines; of the wings 16 lines.

Var.? *Testacea; abdomen albido-testaceum; alæ anticæ lineis transversis interruptis undulatis fuscescentibus, macula subcostali nigricante guttisque marginalibus nigris; posticæ albæ.*

Testaceous. Abdomen whitish testaceous. Fore wings with interrupted transverse undulating brownish lines; a blackish spot near the costa beyond the middle, and a row of black marginal dots. Hind wings white. Length of the body 5 lines; of the wings 12 lines.

a, b. Sierra Leone. Presented by the Rev. D. F. Morgan.

31. Caradrina combinata.

Fœm. *Testacea; thorax fusco conspersus; abdomen pallidum; pallidum, alæ anticæ fusco conspersæ, lineis transversis incompletis undulatis fuscis, linea transversa exteriore e guttis albidis, fascia marginali fusca, macula orbiculari subelliptica, reniformi strigaque cinerea conjunctis; posticæ subcinereæ marginibus pallide fuscescentibus, ciliis albidis.*

Female. Testaceous. Thorax and fore wings speckled with brown. Abdomen rather paler than the thorax. Fore wings with transverse undulating incomplete brown lines, with an exterior transverse line of whitish dots, and with a marginal brown band; orbicular spot subelliptical, rather smaller than the reniform, which is traversed by a longitudinal gray streak. Hind wings slightly cinereous, with pale brownish borders; ciliæ whitish. Length of the body 5½ lines; of the wings 13 lines.

a—c. Congo. Presented by Sir J. Richardson.
d—f. ———? Presented by J. G. Children, Esq.

32. Caradrina conducta.

Mas et fœm. *Cinerea; thorax fasciis fuscescentibus; abdomen albido-cinereum; alæ anticæ lineis transversis incompletis undulatis testaceis, venis obscuris albido guttatis, orbiculari et reniformi indistinctis, hac albo guttatæ, illa parva, linea marginali nigra; posticæ pallide cinereæ, marginibus latis fuscescentibus, ciliis albidis.*

Male and female. Cinereous. Thorax with brownish bands. Abdomen whitish cinereous. Fore wings with incomplete trans-

verse undulating testaceous lines; veins dark, with whitish dots; orbicular and reniform spots indistinct, the former rather small, the latter with white dots; a marginal black line. Hind wings pale cinereous, with broad brownish borders; ciliæ whitish. Length of the body 5—6 lines; of the wings 14—16 lines.

a—c. Congo. Presented by Sir J. Richardson.
d—f. ———? Presented by J. G. Children, Esq.

33. Caradrina atriluna.

Mas et fœm. *Flavescente-cinerea; palporum articulus 2us nigro maculatus; alæ anticæ lineis obsoletis aut indistinctis, guttis tribus costalibus nigris, macula orbiculari obsoleta aut punctum vix conspicuum fingente, reniformi distincta angusta nigro-fusca flavido-fusco marginata; posticæ albæ, subopalinæ, cinereo submarginatæ.*

Caradrina atriluna, *Guén. Noct.* i. 252, 407.

Abyssinia.

Bourbon and Mauritius.

34. Caradrina ignava.

C. blandæ *et* C. ambignæ *affinis; palpi validi, plus ascendentes; alæ anticæ testaceo-cinereæ, lituris indistinctis, lineis medianis approximatis subparallelis, macula orbiculari punctum nigrum fingente, reniformi indeterminata postice nigricante punctisque albis notata; posticæ subhyalinæ testaceo-cinereo sordidæ.*

Caradrina ignava, *Guén. Noct.* i. 247, 394.

Mauritius.

35. Caradrina pigra.

Fœm. *Testaceo-cinerea; palpi nigro-cinerei, apice pallidi; alæ anticæ subnitentes, lineis duabus nebulaque medianis fasciaque marginali subparallelis subflexuosis, macula reniformi e umbra indistincta rufescente punctisque subobsoletis albis; posticæ albæ, subopalinæ, margine cinerascente.*

Caradrina pigra, *Guén. Noct.* i. 248, 399.

Bourbon.

Asia.

Group 1.

Like the second European group.

36. Caradrina paucifera.

Testacea; alæ anticæ guttis duabus (una basali altera discali) fasciaque exteriore guttulari fuscis, guttis marginalibus nigris, maculis orbiculari et reniformi obsoletis; posticæ cinereæ, marginibus fuscescentibus, ciliis albidis.

Testaceous. Fore wings with a brown dot near the base, with another in the disk, with an exterior band of brown dots, and with a more distinct marginal row of black dots; reniform spot and orbicular spot obsolete. Hind wings cinereous, brownish towards the borders; ciliæ whitish. Length of the body 6 lines; of the wings 12 lines.

a. Hindostan. From Archdeacon Clerk's collection.

37. Caradrina bistrigata.

Alæ anticæ obsolete ferrugineo-cinereæ, ad costam luteo punctatæ, strigis duabus undulatis distinctioribus inter strigas maculis ordinariis, albido-cinctis; exteriore reniformi semilutescente; posticæ cinereæ.

Caradrina bistrigata, *Bremer und Grey, Beitr. zur Schmett. Fauna des Nordlichen China's*, 17, 87.

North China.

Country unknown.

38. Caradrina conformis.

Cervina; alæ anticæ lineis nonnullis transversis subundulatis fuscescentibus, linea exteriore cervino pallido extus marginata, maculis reniformi et orbiculari subobsoletis; posticæ pallide cervinæ, nitentes.

Fawn-colour. Abdomen paler than the thorax. Fore wings with four or five brownish transverse slightly undulating lines, the exterior one bordered on its outer side with pale fawn-colour; reniform spot and orbicular spot almost obsolete. Hind wings pale fawn-colour, shining. Length of the body 5 lines; of the wings 12 lines.

a. ——— ? From Mr. Milne's collection.

39. Caradrina indicata.

Pallidissime cervina; alæ anticæ guttis costalibus nigris, macula reniformi nigra albido marginata, orbiculari obsoleta; posticæ albæ, opalinæ.

Very pale fawn-colour. Abdomen paler than the thorax. Fore wings with black dots along the costa; reniform spot black, of the usual form, with a whitish border; orbicular spot obsolete. Hind wings white, opaline. Length of the body 4 lines; of the wings 10 lines.

a. ——— ?

40. Caradrina ? consocia.

Fœm. *Cinerea; thorax strigis duabus transversis nigris; alæ anticæ lineis transversis interruptis pallidioribus et nigricantibus, claviformi indistincta, orbiculari et reniformi distinctis albido marginatis, illa subquadrata, strigis submarginalibus lanceolatis nigris; posticæ cinereæ.*

Female. Cinereous. Third joint of the palpi much longer than in the typical species. Thorax with a minute transverse black streak on each side in front. Abdomen paler than the thorax. Fore wings with transverse irregular and interrupted paler and blackish transverse lines; claviform mark indistinct; orbicular and reniform distinct, with whitish borders, the former somewhat quadrate; a submarginal row of lanceolate black streaks. Hind wings cinereous. Length of the body 5 lines; of the wings 11 lines.

a, b. ——— ? Presented by the Entomological Club.

Genus 6. AMYNA.

Mas et fœm. Proboscis gracilis, mediocriter longa. Palpi breves, recti, squamosi, bicolores; articulus 2us rectangulatus; 3us fere similis minor. Antennæ graciles, filiformes, approximatæ, ciliis paucis sparsis. Thorax lævis, subquadratus, vix robustus. Abdomen læve, gracile. Pedes antici longi, graciles, subsquamosi. Alæ anticæ integræ, trigonæ, apice acuminatæ; posticæ latæ, rotundatæ. *Mas.*—Abdomen conicum. *Fœm.*—Abdomen subconicum.

Amyna, *Guén. Noct.* i. 406.
Perigea, p., *Guén. Noct.* i. 233.

Male and female. Body smooth. Proboscis slender, moderately long. Palpi short, straight, squamose, with two colours;

second joint rectangular; third nearly like the second in shape, but smaller. Antennæ filiform, slender, approximate, with a few isolated bristles. Thorax subquadrate, hardly robust. Abdomen slender. Fore legs long, slender, slightly squamose. Fore wings entire, triangular, acuminated at the tips, with dark lines. Hind wings broad, much rounded, without marks above, distinctly marked beneath. *Male.*—Abdomen conical. *Female*—Abdomen nearly conical.

1. Amyna Selenampha.

Cinerea; alæ anticæ lineis duabus interruptis lunulatis punctisque marginalibus nigricantibus, maculi reniformi et orbiculari indistinctis vix pallidioribus umbra intermedia obscuriore, reniformi arctata postice alba; posticæ nigricante cinereæ, ciliis albo notatis.

Amyna Selenampha, *Guén. Noct.* i. 406, 378, a.

Silhet. Manilla.

2. Amyna Axis.

Rufescente-cinerea; alæ anticæ subintegræ, subacuminatæ, lineis, punctis costalibus maculaque reniformi pallidioribus, hac magna figuram 8 *fingente.*

Perigea octo, *Guén. Noct.* i. 233, 377.

Var. β. *Macula reniformis postice albo notata.*

Amyna Axis, *Guén. Noct.* i. 407, 378, b.

Tahiti.

Fam. 5. NOCTUIDÆ.

Corpus robustum. Proboscis longiuscula aut mediocriter longa. Palpi breves, pilosi, porrecti aut ascendentes; articulus 3us sæpissime, brevissimus. Antennæ *maris* nonnunquam pectinatæ. Abdomen planum, non cristatum. Pedes validi; tibiæ anticæ sæpe spinosæ; posticæ calcaribus longis. Alæ mediocriter latæ; anticæ planæ, non deflexæ.

Noctuilidi, *Boisd. Ind. Méth.* 63. *Guén. Ann. Soc. Ent. Fr.* vi. 347.

Noctuidæ, *Guén. Noct.* i. 253.

Noctuidæ, p., *Steph. Ill. Brit. Ent. Haust.* ii. 100.
Noctuelidi, p., *Steph. Cat. Brit. Lep.* 59.

Body stout. Proboscis long or moderately long. Palpi short, pilose, porrect or ascending; third joint generally very short. Antennæ of the male occasionally pectinated. Abdomen flat, not crested, not extending much beyond the hind wings. Legs stout, pilose; fore tibiæ often spinose, occasionally short; hind tibiæ with more or less long spurs. Wings moderately broad. Fore wings flat, not deflexed.

A. Fasciculus frontalis prominens.
  A. Palpi longiusculi. - - - - 1. RUSINA, *Steph.*
  B. Palpi breves.
    A. Palpi porrecti.
      a. Antennæ *maris* sæpissime pectinatæ aut crenulatæ.
        i. Statura sat magna.
          * Antennæ *maris* pectinatæ, ciliatæ, aut pubescentes. 2. AGROTIS, *Ochs.*
          ** Antennæ *maris* subcrenulatæ. 7. CHERSOTIS, *Boisd.*
        ii. Statura parva. - - - 3. LYCOPHOTIA, *Hübn.*
      b. Antennæ *maris* simplices.
        i. Alæ anticæ margine exteriore vix obliquo. 8. OPIGENA, *Boisd.*
        ii. Alæ anticæ margine exteriore sat obliquo. 5. CHERA, *Hübn.*
    B. Palpi ascendentes.
      a. Palporum articulus 3us brevissimus. 4. HAPALIA, *Hübn.*
      b. Palporum articulus 3us 2i dimidio brevior. 6. SPÆLOTIS, *Boisd.*

B. Fasciculus frontalis non prominens.
  A. Alæ posticæ luteæ.
    A. Palpi longiusculi. - - - 9. EPILECTA, *Hübn.*
    B. Palpi breves. - - - 10. TRIPHÆNA, *Ochs.*
  B. Alæ posticæ non luteæ.
    A. Alæ anticæ costa pallida. - 12. OCHROPLEURA, *Hübn.* 406
    B. Alæ anticæ costa non pallida.
      a. Palpi plus exserti. - - 11. GRAPHIPHORA, *Ochs.*
      b. Palpi minus exserti. - - 13. SEGESTIA, *Steph.*

Genus 1. RUSINA.

Corpus robustum. Proboscis mediocriter longa. Palpi pilosi, longiusculi, ascendentes; articulus 3us cylindricus, 2i dimidio non brevior. Antennæ corporis dimidio longiores. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ, non longæ; anticæ apud costam rectæ, apice rectangulatæ, margine exteriore non obliquo. *Mas.*—Antennæ subcrenulatæ.

Rusina, *Steph. Ill. Brit. Haust.* iii. 111. *Boisd.; Dup.; Guén. Ann. Soc. Ent. Fr.* vi. 346; *Noct.* i. 255.
Agrotis, p., *Ochs.; Treits.*
Noctua, p., *Boisd.*
Scotia, p., *Hübn. Verz. Schmett.* 226.

Body stout. Proboscis moderately long. Palpi rather long, pilose, ascending; third joint cylindrical, full half the length of the second. Antennæ more than half the length of the body. Abdomen extending for about one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad, not long. Fore wings straight in front, rectangular at the tips, not oblique along the exterior border; first, second and third inferior veins approximate; fourth very remote. *Male.*—Antennæ minutely crenulate.

1. Rusina tenebrosa.

Obscure ferruginea; abdomen cinereum; alæ anticæ puncto discali albido, fasciis duabus nigro-ferrugineis, lineis transversis undulatis nigris; posticæ cinereæ. ♂

——— ———, *Engr. Pap. d'Eur.* 387, a—c.
Noctua tenebrosa, *Hübn. Samml. Eur. Schmett. Noct.* pl. 33, f. 158; pl. 107, f. 503. *Frey. Neu. Beit. Schmett.* i. pl. 40. *Dup. Hist. Nat. Lép. Fr.* iii. 11, pl. 72. *Boisd. Ind. Méth.* 100, 752.
Agrotis tenebrosa, *Treit. Schmett. Eur.* v. 1, 180, 26.
Rusina tenebrosa, *Steph. Ill. Brit. Haust.* ii. 112. *Guén. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 256, 408. *Herr.-Schæff. Eur. Schmett.* ii. 207, 82.
Bombyx ferruginea, *Esp. Schmett. Ramb.* iii. pl. 47, f. 5, 6.
Scotia tenebrosa, *Hübn. Verz. Schmett.* 226, 2267.
Noctua (Agrotis) tenebrosa, *Meig. Syst. Besch.* iii. 93, 20, pl. 94, f. 10.

a. England. From Mr. Haworth's collection.
b—p. England. From Mr. Stephens' collection.
q. England. From Mr. Stevens' collection.
r. Scotland. From Mr. Foxcroft's collection.
s—v. England.
w—y. Europe. From M. Becker's collection.

2. Rusina quadrangula.

Nigro-fusca; alæ anticæ cinereo tinctæ lineis transversis undulatis obscurioribus, orbiculari et reniformi concoloribus indistinctis macula quadrata fusco-nigra divisis; posticæ cinereo nigricantes.

Agrotis quadrangula, *Eversm. Faun. Volg-Ural.* 201.
Rusina quadrangula, *Herr.-Schæff. Schmett. Eur.* ii. pl. f. 496. *Guén. Noct.* i. 256, 409.

Ural District. Sarepta. Caucasus.

Genus 2. AGROTIS.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, validi, pilosi; articulus 3us longi-conicus, 2i quadrante non longior. Antennæ corporis dimidio valde longiores. Abdomen alas posticas plus minusve superans. Pedes validi; tibiæ anticæ sæpissime spinosæ, posticæ calcaribus quatuor longis. Alæ plus minusve longæ latæque; anticæ apud costam rectæ, apice rotundatæ aut vix angulatæ, margine exteriore plus minusve obliquo. *Mas.*—Antennæ pectinatæ, ciliatæ aut pubescentes.

Agrotis, *Ochs. Syst. Gloss. Schmett. von Eur.* iv. *Steph.; Boisd. Icon.; Guén. Ann. Soc. Ent. Fr.* vi. 352; *Noct.* i. 257.
Noctua, *Boisd. Index.*
Lytæa, p., *Steph.*
Opigena, *Steph.*
Agronoma, Telmia, Omia, Peridroma, Georyx, Scotia, p., Brotis et Metaxya, *Hübn. Verz. Schmett.*

Body stout. Proboscis moderately long. Palpi porrect, stout, pilose; third joint elongate-conical, not more than one fourth of the length of the second. Antennæ very much more than half the length of the body. Abdomen extending more or less beyond the hind wings. Legs stout; hind tibiæ with four long spurs; fore

tibiæ generally spinose. Wings more or less broad and long. For wings straight in front, rounded or hardly angular at the tips, mor or less oblique along the exterior border. *Male.*—Antennæ pecti nated, ciliated, or pubescent.

The following groups of Guénée will hardly admit of defini tion; their characters are therefore omitted.

Europe.

Group 1.

A. Alæ anticæ venis pallidis.
  A. Alæ breviusculæ. - - - - - obesa, *Boisc*
  B. Alæ longiores.
    A. Alæ posticæ albæ. - - - - Graslinii, *Raml*
    B. Alæ posticæ obscuræ.
      a. Antennæ *maris* pectinatæ. - - trifurca, *Eversm*
      b. Antennæ *maris* vix pectinatæ. - - fatidica, *Hübn*
B. Alæ anticæ venis obscuris.
  A. Alæ anticæ breviores. - - - - puta, *Hübn*
  B. Alæ anticæ longiores.
    A. Alæ anticæ plus minusve cervinæ.
      a. Alæ posticæ *maris* margine obscuro.
        i. Antennæ *maris* pectinatæ. - suffusa, *Wien. Verz*
        ii. Antennæ *maris* vix pectinatæ. valligera, *Wien. Verz*
      b. Alæ posticæ *maris* totæ albæ.
        i. Alæ anticæ macula nulla apicali. - lata, *Treit*
        ii. Alæ anticæ macula apicali testacea. spinifera, *Hübn*
    B. Alæ anticæ fuscæ. - - - - crassa, *Hübn*
    C. Alæ anticæ nigro-cinereæ, postice testaceæ.
      Fennica, *Eversm*
    D. Alæ anticæ rufescente-albidæ, cinereo-fuscoque variæ.
      endogæa, *Boisd*
    E. Alæ anticæ flavo-stramineæ, vitta rufescente.
      sagitta, *Hübn*
    F. Alæ anticæ albido-testaceæ, fascia cinerea.
      erythroxylea, *Treit*

1. Agrotis obesa.

Cervina; abdomen pallide cinerascens; alæ anticæ guttis duabus basalibus, ocellis duabus discalibus, strigis costalibus, maculis in serie duplici exterioribus fasciisque duabus flexis intermediis venisque nigris testaceo ex parte marginatis, ciliis albidis; posticæ fuscescentes, basi costa ciliisque albidis.

Agrotis obesa, *Boisd. Ind. Méth.* 112, 858. *Icon. Lép. d'Eur.* pl. 75, f. 1, 2. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 259, 411. *Treit. Schmett. Eur. Suppl.* x. 42. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 173, pl. 16. *Herr.-Schæff. Schmett. Eur.* ii. pl. 5, f. 22.

South France.

2. Agrotis lata.

Rufescente-cinerea (mas) *aut cinereo-cervina* (fœm.); *antennæ* maris *pectinatæ; abdomen* maris *albidum*, fœm. *cinereum; alæ anticæ fasciis angulosis pallidioribus et nigricantibus, maculis distinctis sat magnis, pallidiore et nigricante marginatis, orbiculari subelliptico; posticæ* maris *albæ*, fœm. *cinereæ.*

Agrotis lata, *Treit. Schmett. Eur. Suppl.* x. 24. *Frey. Heiger. Boisd. Ind. Méth.* 111, 856. *Herr.-Schæff. Schmett. Eur.* ii. pl. 4, f. 20; pl. 6, f. 29. *Guén. Noct.* i. 260, 412.

Agrotis crassa, *var.?*

Sicily.

3. Agrotis crassa.

Fœm. *Fusca; abdomen cervino-albidum; alæ anticæ nebulis, lineis duabus transversis undulosis duplicatis necnon denticulis ocelloque intermediis denticulisque majoribus exterioribus nigricantibus; posticæ albæ, margine fuscescente.*

——— ———, *Engr. Pap. d'Eur.* 446, b; 448, b, c.

Noctua crassa, *Hübn. Samml. Eur. Schmett. Noct.* pl. 121, f. 560 (mas); *God. Hist. Nat. Lép. Fr.* v. 236, pl. 67, f. 1, 2.

Agrotis crassa, *Treit. Schmett. Eur.* v. 1, 166, 19. *Boisd. Ind. Méth.* 111, 857. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 260, 414.

Noctua Tritici, *Wien. Verz.* 81, 10.

Noctua segetum, *Esp. Schmett.* pl. 60, f. 5.
Agronoma crassa, *Hübn. Verz. Schmett.* 227, 2276.
Bombyx segetum, *Esp. Schmett.* iii. pl. 60, f. 5.
Noctua (Agrotis) crassa, *Meig. Syst. Besch.* iii. 91, 16, pl. 95, f. 4.

a, *b*. Europe. From M. Becker's collection.
c—*f*. Gibraltar. From Mr. Milne's collection.
g. Italy. From Dr. Leach's collection.

4. Agrotis fatidica.

Cervina; thorax ex parte albido pilosus, fascia antica nigricante; alæ anticæ lituris basalibus et costalibus strigis discalibus et exterioribus punctisque marginalibus nigricantibus, maculis nigro ex parte marginatis, claviformi elongata, orbiculari et reniformi macula fusca divisis, hac sublunata, illa elliptica; posticæ cinerascentes. Mas.—*Antennæ subpectinatæ.*

Noctua fatidica, *Hübn. Samml. Eur. Schmett.* 704.
Agrotis fatidica, *Boisd. Ind. Méth.* 111, 854. *Herr.-Schæff. Schmett. Eur.* ii. pl. 89, f. 456. *Guén. Noct.* i. 262, 418.

South Russia.

a. Europe. From M. Becker's collection.

5. Agrotis valligera.

Fusca; thorax postice albidus; abdomen subtestaceum, basi albidum, maculis lateralibus nigris; alæ anticæ canescentes, fusco variæ, ocellis duobus maculaque posteriore obscure fuscis cano nigroque marginatis; posticæ albidæ, macula discali margineque subcinereis.

——— ———, *Engr. Pap. d'Eur.* 441.
Phalæna-Noctua valligera, *Gmel. ed. Syst. Nat.* i. 5, 2541, 1026.
Noctua valligera, *Wien. Verz* 80, 9. *Fabr. Mant. Ins.* ii. 158, 157; *Ent. Syst.* iii. 2, 72, 203. *Bork. Eur. Schmett.* iv. 551, 224. *Hübn. Samml. Eur. Schmett. Noct.* pl. 32, 250; pl. 101, f. 478. *Haw. Lep. Brit.* 179. *God. Hist. Nat. Lép. Fr.* v. 223, pl. 65, f. 2, 3. *Frey. Neu. Beit. Schmett.* i. pl. 81.
Agrotis valligera, *Treit. Schmett. Eur.* v. 163, 18. *Steph. Ill. Brit. Haust.* ii. 118. *Boisd. Ind. Méth.* 111, 855. *Guén. Noct.* i. 263, 419.
Agronoma valligera, *Hübn. Verz. Schmett.* 227, 2278.
Noctua clavis, *Esp. Schmett.* iii. pl. 63, f. 5.

Noctua trigonalis, *Esp. Schmett.* iii. pl. 75, f. 6.
Noctua (Agrotis) valligera, *Meig. Syst. Besch.* iii. 90, 15, pl. 93, f. 8.

—r. England. From Mr. Stephens' collection.
—u. England.
v, x. Europe. From M. Becker's collection.

6. Agrotis endogæa.

Rufescente-albida; antennæ maris *pectinatæ; palpi albi, fusco maculati; abdomen ochraceo tinctum; alæ anticæ cinereo tinctæ, fusco nebulosæ, lineis medianis subobsoletis, strigis exterioribus lanceolatis bene determinatis, macula apiculi obscura, orbiculari longi-ovata fusco pupillata, reniformi sat magna nigro plagiata; posticæ albæ.*

Agrotis endogæa, *Boisd. Icon. Lép. d'Eur.* pl. 75, f. 5; *Ind. Méth.* 109, 832. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 264, 420.

Var. Agrotis sabulosa, *Ramb. Faun. Andal.*

Corsica. South Spain.

7. Agrotis Graslinii.

Cinereo-rufescens; alæ anticæ supra lineis duabus sinuatis albidis, media venulis externa lineolis sagittatis fuscis obliteratis, macula reniformi fusca albo intus marginata, orbiculari minima elongata alba nigro subocellata; alæ posticæ albæ; antennæ maris *pectinatæ.*

Agrotis Graslinii, *Rambur, Ann. Soc. Ent. Fr.* 2me *Sér.* vi. 70, pl. 1, No. 1, f. 1, 2. *Guén. Noct.* i. 264, 421.

West France.

a. Europe. From M. Becker's collection.

8. Agrotis sagitta.

Flavo-straminea; alæ anticæ vitta discali abbreviata dislocata maculis interrupta rufescente, strigis exterioribus interruptis lanceolatis nigricantibus, maculis albido nigroque ex parte marginatis, orbiculari parva rotunda; posticæ albidæ, margine cinerascente.

Noctua sagitta, *Hübn. Samml. Eur. Schmett. Noct.* f. 596.

Telmia sagitta, *Hübn. Verz. Schmett.* 228, 2284.
Agrotis sagitta, *Boisd. Ind. Méth.* 111, 850. *Herr.-Schæff. Schmett. Eur.* ii. pl. 6, f. 26. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 265, 422.

South Russia.

9. Agrotis trifusca.

Cinerascens; thorax fascia antica nigro-fusca; abdomen pallidum; alæ anticæ disco ex parte, costa margineque exteriore fuscis, strigis exterioribus lunulisque marginalibus nigris, maculis nigro marginatis, claviformi et orbiculari longissimis, reniformi lunulata; posticæ albidæ, marginibus fuscescentibus.

Agrotis trifusca, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837, 1; *Faun. Volg-Ural.* 198. *Herr.Schæff. Schmett. Eur.* ii. pl. 25, f. 120. *Guen. Noct.* i. 265, 423.

South Russia.

10. Agrotis spinifera.

Cervina; abdomen albido-testaceum; alæ anticæ fascia exteriore e maculis nigris, macula apicali testacea, maculis discalibus nigro marginatis claviformi elongata; posticæ albidæ.

Noctua spinifera, *Hübn. Samml. Eur. Schmett.* 389.
Telmia spinula, *Hübn. Verz. Schmett.* 228, 2285.
Agrotis spinifera, *Treit. Schmett. Eur.* vi. 1, 382; *Suppl.* x. 2, 24. *Boisd. Ind. Méth.* 109, 830. *Herr.-Schæff. Schmett. Eur.* ii. pl. 5, f. 24. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 265, 424.

Sicily. South Spain.

11. Agrotis puta.

Pallide fusca; abdomen albidum; alæ anticæ basi margine exteriore, lineis transversis undulatis lineolisque discalibus fuscis, ocello discali reniformi obscuriore; posticæ albidæ, litura discali fusco.

Noctua puta, *Hübn. Samml. Eur. Schmett.* 255.
Omia puta, *Hübn. Verz. Schmett.* 245, 2436.
Agrotis puta, *Treit. Schmett. Eur.* iii. 32; *Suppl.* 213. *God. Hist. Nat. Lép. Fr.* ii. 243, pl. 67, f. 7. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 266, 427. *Boisd. Ind Méth.* 111, 852.

Var. ——— ———, *Engr. Pap. d'Eur.* 440, a, b; 449, a.
Noctua renitens, *Hübn. Eur. Schmett.* f. 715—717.
Noctua lignosa, *God. Hist. Nat. Lép. Fr.* ii. 241, pl. 67, f. 5, 6.
Bombyx radius, *Haw. Lep. Brit.* 67.
Agrotis radiola, *Steph. Ill. Brit. Ent. Haust.* ii. 110, pl. 20, f. 1.
Agrotis puta, *Boisd. Icon. Lép. d'Eur.* pl. 81.

s—d. England. Presented by W. Wing, Esq.
e—r. England. From Mr. Stephens' collection.
s. England.
t, v. Europe. From M. Becker's collection.
u. Gibraltar. From Mr. Milne's collection.
w. ——— ?

Five varieties of this species are described by Bentley, in 'The Entomologist,' p. 255.

12. Agrotis erythroxylea.

Albido-testacea; alæ anticæ fascia lata basali cinerea extus undulata et interlineata, macula reniformi albo nigroque marginata, linea exteriore transversa guttulari nigra, lineolis submarginalibus albis, plaga marginali rufa; posticæ albidæ.

Agrotis erythroxylea, *Treit. Schmett. Eur.* iii. 31. *Boisd. Ind. Méth.* 109, 831. *Herr.-Schæff. Schmett. Eur.* ii. pl. 6, f. 28. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 267, 428.

Italy.

13. Agrotis suffusa.

Cervina, nonnunquam obscurior; thorax antice nigro fasciatus; abdomen pallidum; alæ anticæ lineis transversis duplicatis undulatis fuscis, linea transversa exteriore angulosa pallida, strigis duabus exterioribus unaque apud reniformem atris, maculis ex parte nigro marginatis, claviformi elongata, orbiculari pyriformi; posticæ albæ (mas) *aut cinereæ* (fœm.) *margine obscuriore, ciliis albidis.*

——— ———, *Engr. Pap. d'Eur.* 452, a—c.
Phalæna-Noctua suffusa, *Gmel. ed. Syst. Nat.* i. 5, 2541, 1028.
Noctua suffusa, *Wien. Verz.* 80, 4. *Fabr. Mant. Ins.* ii. 157, 155; *Ent. Syst.* iii. 2, 71, 201. *Bork. Eur. Schmett.* 223. *Hübn. Samml. Eur. Schmett. Noct.* pl. 28, f. 34. *Haw. Lep. Brit.* 155. *God. Hist. Nat. Lép. Fr.* v. 255, pl. 69, f. 1, 2.
Agrotis suffusa, *Treit. Schmett. Eur.* v. 1, 152, 15. *Steph. Ill. Brit. Haust.* ii. 116. *Boisd. Ind. Méth.* 109, 822. *Guén. Noct.* i. 268, 431.

Phalæna-Bombyx idonea, *Cram. Pap. Exot.* iii. 150, pl. 271 f. H.

New York.

Phalæna-Noctua idonea, *Cram. Pap. Exot.* iv. 43, pl. 311, f. A.

Surinam.

Bombyx spinula, *Esp. Schmett.* iii. pl. 63, f. 6, 7.
Peridroma suffusa, *Hübn. Verz. Schmett.* 227, 2275.
Noctua (Agrotis) suffusa, *Meig. Handb.* 154, 17; *Syst. Besch.* iii 87, 10, pl. 94, f. 3.

a, b. England. Presented by W. Wing, Esq.
c—p. England. From Mr. Stephens' collection.
q. England.
r, s. Europe. From M. Becker's collection.
t. Orilla, West Canada. From Mr. Bush's collection. (Colou very dark).
v, u. Philadelphia. Presented by E. Doubleday, Esq.
w—aa. St. Martin's Falls, Albany River, Hudson's Bay. Pre sented by Dr. Barnston.
bb. Nova Scotia. From Lieut. Redman's collection.
cc—ee. Venezuela. From Mr. Dyson's collection.
ff. New Zealand. Presented by Dr. Sinclair.
gg—ij. New Zealand. Presented by Col. Bolton.
kk. New Zealand. From Mr. Earl's collection.
ll. Punjaub. Presented by General Hearsay.
mm. North China. From Mr. Fortune's collection.
nn. North India. From Mr. James' collection.
oo. Silhet. From Mr. Melly's collection.
pp, qq. South Africa. Presented by Dr. A. Smith.
rr. Cape. From M. Dregé's collection.
ss, tt. Egypt. Presented by J. Burton, Esq.
vv. Monte Video. Presented by C. Darwin, Esq.
uu. Bahia. Presented by C. Darwin, Esq.
ww. Moreton Bay. Presented by Morton Allport, Esq.
xx, yy. Adelaide. Presented by the Entomological Club.

14. Agrotis fennica.

Nigro-cinerea; abdomen testaceum; alæ anticæ postice testaceæ, lineis transversis duplicatis undulatis nigris, maculis nigro marginatis, claviformi elongata, orbiculari alba subrotunda, reniformi testacea, linea transversa exteriore angulosa cinerea; posticæ cinereæ.

grotis fennica, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837, 1; *Faun. Volg-Ural.* 193. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 533, pl. 90. *Herr.-Schæff. Schmett. Eur.* ii. pl. 30, f. 146, 147. *Guén. Noct.* i. 270, 434.
pigena fennica, *Steph. Cat. Brit. Lep.* 70.

b. St. Petersburg. Presented by J. Gutch, Esq.
Trenton Falls, New York. Presented by E. Doubleday, Esq.
e. ——— ? From Mr. Milne's collection.
g. Nova Scotia. From Lieut. Redman's collection.

Group 2.

15. Agrotis saucia.

Fusco-cervina; alæ anticæ lituris basalibus et costalibus punctisque marginalibus nigris, maculis orbiculari et reniformi magnis nigro marginatis, hac extus excavata, illa subrotunda; posticæ cinerascentes, venis margineque fuscis.

——— ———, *Engr. Pap. d'Eur.* 453, a, b.
loctua saucia, *Hübn. Samml. Eur. Schmett.* 378.
eridroma saucia, *Hübn. Verz. Schmett.* 227, 2272.
grotis saucia, *Treit. Schmett. Eur.* i. 149. *God. Hist. Nat. Lép. Fr.* ii. 260, pl. 69 *Boisd. Ind. Méth.* 108, 821. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 271, 435.
loctua æqua, *Geyer, Samml. Eur. Schmett.* f. 812.
grotis æqua, *Steph. Ill. Brit. Haust.* ii. 115.

—*c.* England. From Mr. Stephens' collection.
e. England.
—*j.* Europe. From M. Becker's collection.
Madeira. Presented by Mrs. Hope.
Teneriffe.

16. Agrotis agricola.

Cinerea; thorax antice nigro fasciatus; abdomen testaceum; alæ anticæ lineis transversis undulatis duplicatis nigricantibus, claviformi nonnunquam subobsoleta, orbiculari et reniformi nigro marginatis, illa obliqua subelliptica; posticæ cinerascentes, margine fuscescente, ciliis albis.

grotis agricola, *Boisd. Ind. Méth.* 108, 820. *Geyer, Samml. Eur. Schmett.* 853. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 186, pl. 17, f. 3, a. *Herr.-Schæff. Schmett. Eur.* ii. pl. 80, f. 412. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 271, 436.

Swiss Alps. South France. Pyrenees. Spain. Cayenne.

a. Europe. From M. Becker's collection.

Group 3.

A. Alæ anticæ pallidæ. - - - - - Trux, *Hübn*

B. Alæ anticæ obscuræ.

A. Alæ posticæ *maris* pallidæ.

A. Alæ anticæ striga conspicua nigro-fusca. exclamationis, *Linn*

B. Alæ anticæ striga nulla conspicua.

a. Alæ anticæ cervinæ aut fuscæ.

i. Alæ anticæ latiores. - - segetum, *Wien. Verz*

ii. Alæ anticæ angustiores. - - - sicania, *Boisd*

b. Alæ anticæ glauco-nigricantes. - lunigera, *Stepl*

B. Alæ posticæ *maris* obscuræ.

A. Alæ anticæ macula subapicali. - corticea, *Wien. Verz*

B. Alæ anticæ macula nulla subapicali. - Cos, *Hübn*

17. Agrotis segetum.

Cervina; thorax fascia antica nigra; abdomen testaceum; al anticæ testaceæ aut cervinæ aut fuscæ, obscuriore consperse maculis nigro marginatis, claviformi elongata, orbiculari ovat aut elliptica, reniformi magna; posticæ maris *albæ*, fœm *subcinereæ.*

———, *Engr. Pap. d'Eur.* 448, a.

Phalæna-Noctua Segetis, *Gmel. ed. Syst. Nat.* i. 5, 2539, 1018.

Noctua segetum, *Wien. Verz.* 81, 12, pl. 1, f. 3, a, b. *God. His Nat. Lép. Fr.* ii. 252, pl. 68.

Noctua segetis, *Fabr. Sp. Ins.* ii. 223, 78; *Mant. Ins.* ii. 152, 128 *Ent. Syst.* iii. 2, 61, 171. *Hübn. Eur. Schmett. Noct.* f. 146

Noctua fuscosa, *Esp. Schmett.* iii. pl. 64, f. 4. *Bork. Eur. Schmet* iv. 563, 231.

Noctua caliginosa, *Esp. Schmett.* iii. pl. 64, f. 3.

Bombyx catenatus, *Haw. Lep. Brit.* 54.

Bombyx pectinatus, *Haw. Lep. Brit.* 55.

Bombyx spinulus, *Haw. Lep. Brit.* 57.

Agrotis segetum, *Treit. Schmett.* i. 155. *Steph. Ill. Brit. En Haust.* ii. 115. *Boisd. Ind. Méth.* 109, 823. *Guén. Noct.* 274, 442.

Georyx segetum, *Hübn. Verz. Schmett.* 227, 2280.

Noctua (Agrotis) segetum, *Meig. Syst. Besch.* iii. 88, 11, pl. 94 f. 6.

b—c. England. Presented by H. Doubleday, Esq.
d—aaa. England. From Mr. Stephens' collection.
bbb—eee. England.
fff—hhh. Europe. From M. Becker's collection.
iii. Gibraltar. From Mr. Milne's collection.
jjj, kkk. France.
lll. ———?

18. Agrotis sicania.

A. Cos *et* A. segetum *affinis; alæ anticæ angustiores, cinereo-fuscæ, strigis transversis dentatis obscurioribus, maculis ordinariis albido-cinereis, rotunda dilutiore oblonga longitudinaliter posita; posticæ albidæ.*

Agrotis sicula, *Boisd. Ind. Méth.* 109, 824. *Dup. Cat. Méth. Lép. d'Eur. Guén. Ann. Soc. Ent. Fr.* vi. 240, 2.
Agrotis sicania, *Guén. Noct.* i. 275, 443.

Sicily.

19. Agrotis Cos.

Cervino-fusca; alæ anticæ fasciis undulatis obscurioribus; posticæ pallidiores, macula discali margineque lato fuscis.

Noctua Cos, *Hübn. Samml. Eur. Schmett. Noct.* f. 720.
Agrotis Cos, *Boisd. Icon. Lép. d'Eur.* pl. 79, f. 2; *Ind. Méth.* 109, 825. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 181, pl. 17, f. 2. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 278, 450.
Noctua Livia? *Frey. Neu. Beit. Schmett.* pl. 95.
Noctua denticulosa?? *Esp. Schmett.* pl. 183, f. 3.
Var. Agrotis tephra, *Boisd.*

20. Agrotis Trux.

Cinereo-testacea; abdomen testaceum; alæ anticæ ferrugineo subconspersæ, macula reniformi ferruginea punctis rufis marginata, linea transversa exteriore guttulari rufa, lituris aliis obsoletis; posticæ albæ.

Noctua Trux, *Hübn. Samml. Eur. Schmett. Noct.* 723, 725, 770. *Freyer, Beitr.* pl. 72.
Agrotis Trux, *Treit. Schmett. Eur. Suppl.* x. 22. *Boisd. Icon. Lép. d'Eur.* pl. 79, f. 4; *Ind. Méth.* 109, 826. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 279, 451.
Noctua (Agrotis) Trux, *Meig. Syst. Besch.* iii. 88, 12, pl. 99, f. 6, 7.

a—c. Europe. From M. Becker's collection.

21. Agrotis lunigera.

Glauco-nigricans; antennæ maris *ciliatæ; abdomen cinereum basi albidum; alæ anticæ claviformi elongata atra, orbiculari et reniformi atro marginatis, illa elliptica obliqua flava; posticæ* maris *albidæ*, fœm. *pallide cinereæ, margine obscuriore.*

Agrotis lunigera, *Steph. Ill. Brit. Ent. Haust.* ii. 113, pl. 20, f. 2. *Guén. Noct.* i. 280, 452.

a, b. Isle of Wight. From Mr. Stevens' collection.

22. Agrotis exclamationis.

Cervina; thorax antice nigro fasciatus; alæ anticæ lineis transversis undulatis indistinctis obscurioribus, orbiculari et reniformi nigro-fusco marginatis, orbiculari subelliptico, reniformi fusco, striga postica lanceolata nigro-fusca. Mas.—*Abdomen albido-testaceum; alæ posticæ albæ.* Fœm.—*Abdomen cervinum; alæ posticæ cinereo-fuscæ, ciliis albis.*

———, *Engr. Pap. d'Eur.* 442, a—c. *Deg. Ins.* ii. 406, pl. 6. *Geoff. Ins. Par.* 101. *Schæff. Icon.* ii. pl. 112.

Phalæna-Noctua exclamationis, *Linn. Faun. Suec.* 1170. *Clerck, Icon.* pl. 1, f. 4. *Gmel. ed. Syst. Nat.* i. 5, 2541, 155.

Noctua exclamationis, *Wien. Verz.* 84, 2. *Fabr. Sp. Ins.* ii. 225, 86; *Mant. Ins.* ii. 157, 153; *Ent. Syst.* iii. 2, 70, 198, pl. 64. *Bork. Eur. Schmett.* iv. 546, 221. *Hübn. Samml. Eur. Schmett. Noct.* pl. 311, f. 149. *Haw. Lep. Brit.* 169. *God. Hist. Nat. Lép. Fr.* v. pl. 67, f. 3, 4.

Agrotis exclamationis, *Treit. Schmett* v. 1, 160, 17. *Steph. Ill. Brit. Ent. Haust.* ii. 126. *Boisd. Ind. Méth.* 109, 827. *Guén. Noct.* i. 280, 453.

Agronoma exclamationis, *Hübn. Verz. Schmett.* 227, 2279.

Noctua (Agrotis) exclamationis, *Meig. Handb.* 154, 18; *Syst. Besch.* iii. 90, 14, pl. 93, f. 9.

a, b. England. Presented by H. Doubleday, Esq.
c—cc. England. From Mr. Stephens' collection.
dd. England. From Mr. Foxcroft's collection.
ee—kk. England.
ll, mm. Europe. From M. Becker's collection.
nn, oo. Europe. From Mr. Milne's collection.

23. Agrotis corticea.

Cervino-fusca; thorax lineis transversis anticis biarcuatis obscurioribus, postice albidus; abdomen subtestaceum; alæ anticæ punctis paucis nigricantibus, macula costali subapicali, lineis duabus transversis undulatis annulisque tribus intermediis discalibus fuscis, annuli exterioris disco cinereo; posticæ cinerascentes, lunula discali margineque obscurioribus.

——— ———, *Engr. Pap. d'Eur.* 447, a, b.

Noctua corticea, *Wien. Verz.* 81, 13. *Hübn. Samml. Eur. Schmett. Noct.* pl. 31, f. 145. *God. Hist. Nat. Lép. Fr.* v. 250, pl. 68, f. 3, 4

Agrotis corticea, *Treit. Schmett. Eur.* v. 1, 158, 16. *Steph. Ill. Brit. Ent. Haust.* ii. 114. *Boisd. Ind. Méth.* 109, 829. *Guén. Ann. Soc. Ent. Fr.* 240; *Noct.* i. 281, 455.

Georyx corticea, *Hübn. Verz. Schmett.* 227, 2281.

Noctua exclamationis, *Esp. Schmett.* iii. pl. 64, f. 1, 2.

Noctua sordida, *Hübn. Schmett. Noct.* pl. 32, f. 154.

Noctua (Agrotis) corticea, *Meig. Syst. Besch.* iii. 89, 13, pl. 93, f. 10.

a—r. England. From Mr. Stephens' collection.
s, t. England. From Mr. Carter's collection.
v, u. England.
w. Europe. From Mr. Milne's collection.

Group 4.

A. Alæ posticæ *maris* albæ.
  A. Alæ anticæ cinereæ.
    A. Orbicularis et reniformis fuscæ. - desertorum, *Boisd.*
    B. Orbicularis et reniformis nigræ. - sabuletorum, *Boisd.*
  B. Alæ anticæ cinereo-rufæ. - - - - Ripæ, *Hübn.*
B. Alæ posticæ *maris* albæ, margine obscuro.
  A. Alæ posticæ linea discali. - - - hilaris, *Frey.*
  B. Alæ posticæ linea nulla discali.
    A. Orbicularis pyriformis. - - - cursoria, *Naturf.*
    B. Orbicularis rotunda. - - . deserticola, *Eversm.*
C. Alæ posticæ *maris* cinereæ.
  A. Alæ anticæ cinereo-fuscæ. - - cinerea, *Wien. Verz.*
  B. Alæ anticæ cinereæ. - - - - Simplonia, *Geyer.*

24. Agrotis cinerea.

Cinerea; thoraxe fascia antica obscure fusca; alæ anticæ obscure cinereo-fuscæ, lineis duabus transversis angulosis fasciaque intermedia nigricantibus.

Noctua cinerea, *Wien. Verz.* 80, 3. *Bork. Eur. Schmett.* iv. 547 222. *Hübn. Samml. Eur. Schmett. Noct.* pl. 33, f. 155, 156 *God. Hist. Nat. Lép. Fr. Suppl.* ii. 274, pl. 71, f. 5, 6. *Freyer Ent. Zeit. Stett.* ii. 92.

Noctua obscura, *Hübn. Eur. Schmett. Noct.* pl. 104, f. 490.

Agrotis cinerea, *Treit. Schmett. Eur.* v. 9, 178, 25. *Curt. Brit Ent.* pl. 165. *Steph. Ill. Brit. Ent. Haust.* ii. 127. *Guén Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 282, 457. *Boisd. Ind Méth.* 109, 853. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 178, pl. 17.

Scotia cinerea, *Hübn. Verz. Schmett.* 226, 2269.

Noctua (Agrotis) cinerea, *Meig. Syst. Besch.* iii. 92, 19, pl. 99, f. 4.

a, b. England. From Mr. Stephens' collection.
c, d England.

25. Agrotis Simplonia.

Cano-cinerea; alæ anticæ fasciis quatuor angustis undulatis subobsoletis fuscescentibus; posticæ basi pallidiores.

Noctua Simplonia, *Geyer, Samml. Eur. Schmett.* f. 798, 799. *Frey. Neu. Beit. Schmett.* ii. pl. 136.

Agrotis Simplonia, *Treit. Schmett. Eur. Suppl.* x. 27. *Boisd. Icon. Lép. d'Eur.* pl. 82, f. 1, 3; *Ind. Méth.* 109, 834. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 282, 458. *Dup. Hist. Nat. Lép. Fr. Suppl.* 209, pl. 19. *Herr.-Schæff. Schmett. Eur.* ii. pl. 93, f. 478, 479.

a—c. Europe. From M. Becker's collection.

26. Agrotis sabuletorum.

Statura A. Tritici; *alæ anticæ cinereæ, striga subterminali denticulata, maculis ordinariis cavis punctulisque marginalibus nigris; posticæ albæ.*

Agrotis sabuletorum, *Boisd. Ind. Méth.* 109, 835. *Herr.-Schæff. Schmett. Eur.* ii. pl. 4, f. 19. *Guén. Noct.* i. 283, 461.

South Russia.

27. Agrotis desertorum.

A. ripariæ *subaffinis; alæ anticæ angustæ, cinereæ, strigis tribus punctisque marginalibus nigris, maculis ordinariis fuscis, rotunda longitudinali minuta; posticæ niveæ; quatuor subtus albæ, puncto discali nigro.*

Agrotis desertorum, *Boisd. Ind. Méth.* 111, 849. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 284, 462.

South Russia.

28. Agrotis Ripæ.

Cinereo-cervina; abdomen pallidum; alæ anticæ claviformi nigra, orbiculari et reniformi nigro marginatis, macula exteriore discali flava, lineis duabus transversis exterioribus e guttis nigris; posticæ albidæ, linea guttulari discali nigricante.

Noctua Ripæ, *Hübn. Samml. Eur. Schmett. Noct.* f. 702, 703. *Frey. Beitr. Gesch. Eur. Schm.* pl. 116, f. 4.

Agrotis Ripæ, *Treit. Schmett. Eur.* i. 174. *Boisd. Icon. Lép. d'Eur.* pl. 75, f. 6; *Ind. Méth.* 111, 848. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 220, pl. 20? *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 284, 463.

Var. *Alæ anticæ cinereo-rufæ, lineis tribus transversis, exteriore plus minusve angulata, maculis ordinariis rufo-fuscis, costa nunc alba nunc cinerea,* maris *latiore, venis interdum albidis, margine externo serie punctorum nigra; alæ posticæ* maris *albæ,* fœminæ *fuscescentes.*

Agrotis Desillii, *Pierret, Ann. Soc. Ent. Fr.* viii. 95, pl. 8, f. 2. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 476, pl. 41, f. 3.

Agrotis nebulosa, *Steph. Ill. Brit. Haust.* ii. 127, pl. 22, f. 1.

Normandy.

i—k. England. From Mr. Stephens' collection.

j. England.

29. Agrotis cursoria.

Cervina; thorax linea antica transversa fusca; abdomen testaceum; alæ anticæ claviformi elongata, orbiculari et reniformi albidis ex parte fusco marginatis, illa pyriformi, lineis transversis undulatis fuscescentibus, fascia exteriore albida; posticæ albidæ, margine obscuriore.

Noctua cursoria, *Naturf.* ix. 140. *View. Schm.* 94, pl. 3, f. 6. *Bork. Eur. Schmett.* 230. *Hübn. Samml. Eur. Schmett.* 540. *Frey. Neu. Beit. Schmett.* ii. pl. 99.
Noctua mixta, *Fabr. Ent. Syst.* iii. 2, 118, 356.
Agrotis cursoria, *Treit. Schmett. Eur.* i. 176; *Suppl.* x. 25. *Boisd. Icon. Lép. d'Eur.* pl. 79, f. 3; *Ind. Méth.* 110, 847. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 284, 464.
Georyx cursoria, *Hübn. Verz. Schmett.* 227, 2283.

a—s. England. From Mr. Stephens' collection.
t. England. From Mr. Carter's collection.
v. Scotland. From Mr. Foxcroft's collection.
u, w. England.
x, y. Europe. From M. Becker's collection.

30. Agrotis deserticola.

Cervina; thorax albido varius; abdomen albidum; alæ anticæ venis lineisque transversis undulatis albidis, macula claviformi fusca sat longa, orbiculari et reniformi albo marginatis, illa rotunda, fascia exteriore fusca; posticæ albæ, margine fuscescente.

Agrotis deserticola, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842, 3. *Faun. Volg-Ural.* 201. *Herr.-Schæff. Schmett. Eur.* ii. pl. 96 f. 492. *Guén. Noct.* i. 284, 465.

Sarepta.

31. Agrotis hilaris.

Cinerea; alæ anticæ lineis transversis duplicatis distinctis nigricantibus, maculis nigricante marginatis, claviformi elongata orbiculari parva rotunda, reniformi magna.

Agrotis hilaris, *Frey. Neu. Beit. Schmett.* iii. 89, pl. 255. *Guén. Noct.* i. 285, 466.

Constantinople.

Group 5.

A. Alæ anticæ venis pallidis. - - aquilina, *Wien. Verz.*
B. Alæ anticæ venis non pallidis.
A. Alæ anticæ apud costam non pallidiores.
A. Orbicularis et reniformis non obscuriores.
a. Alæ posticæ ciliis obscuris.
i. Alæ posticæ litura nulla discali.

* Alæ anticæ guttis nullis albidis.
† Alæ posticæ non albidæ. - nigricans, *Linn.*
†† Alæ posticæ albidæ. - - molothina, *Esp.*
** Alæ anticæ guttis costalibus albidis.
siliginis, *Friv.*
ii. Alæ posticæ litura discali. - adumbrata, *Eversm.*
b. Alæ posticæ ciliis albis. - - - Tritici, *Linn.*
B. Orbicularis et reniformis obscuriores. - recussa, *Hübn.*
B. Alæ anticæ apud costam pallidiores.
A. Reniformis sat lata. - - - obelisca, *Wien. Verz.*
B. Reniformis angusta. - - - - agathina, *Dup*

32. Agrotis nigricans.

Piceo-fusca, punctis pallidis; thorax fascia biarcuata nigra; abdomen subtestaceum; alæ anticæ ocello subquadrato discali fasciisque tribus angulosis fuscis nigro testaceoque marginatis; posticæ cinerascentes, margine obscuriore.

Var. *Ferrugineo-fusca; alæ anticæ annulis duobus nigris fasciis incompletis; posticæ albæ, cinereo marginatæ.*

———, *Engr. Pap. d'Eur.* 391.

Phalæna-Noctua nigricans, *Linn. Faun. Suec.* 1220. *Gmel. ed. Syst. Nat.* i. 5, 2574, 178.

Phalæna (Noctua) fumosa, *Gmel. ed. Syst. Nat.* i. 5, 2574, 1167.

Noctua rubricans, *Esp. Schmett.* iv. pl. 130, f. 2, 3. *Bork. Eur. Schmett.* iv. pl. 130, f. 2, 3.

Noctua fuliginea, *Hübn. Schmett. Eur. Noct.* pl. 131, f. 602. *God. Hist. Nat. Lép. Fr.* v. pl. 78, f. 5, 6.

Noctua carbonea, *Hübn. Schmett. Eur. Noct.* f. 700, 701.

Noctua ursina, *God. Hist. Nat. Lép. Fr.* v. pl. 71, f. 3.

Noctua ruris, *Haw. Lep. Brit.* 175.

Noctua vilis? *Hübn. Schmett. Eur. Noct.* f. 511.

Noctua nigricans, *Wien. Verz.* 81, 19. *Fabr. Sp. Ins.* ii. 238, 138; *Mant. Ins.* ii. 178, 279; *Ent. Syst.* iii. 2, 115, 346. *Esp. Schmett.* iv. pl. 107, f. 5. *Bork. Eur. Schmett.* iv. 58, 241. *Haw. Lep. Brit.* 173.

Noctua fumosa, *Wien. Verz.* 81, 18. *Fabr. Mant. Ins.* ii. 179, 281; *Ent. Syst.* iii. 2, 115, 348. *Bork. Eur. Schmett.* iv. 58. 240. *God. Hist. Nat. Lép. Fr.* v. pl. 70, f. 3, 4. *Hübn. Schmett. Eur. Noct.* pl. 32, f. 153.

Agrotis fumosa, *Treit. Schmett.* v. 1, 140, 8. *Boisd. Ind. Méth.* 110, 846. *Guén. Noct.* i. 286, 468. *Steph. Ill. Brit. Ent. Haust.* ii. 125.

Agrotis ruris, *Steph. Ill. Brit Ent. Haust.* ii. 125.
Brotis fumosa, *Hübn. Verz. Schmett.* 226, 2270.
Noctua (Agrotis) nigricans, *Meig. Syst. Besch.* iii. 85, 7, pl. 95, f. 7.

a—cc. England. From Mr. Stephens' collection.
dd—kk. England.
ll, mm. Europe. From M. Becker's collection.
nn. ——— ?

Bentley has described twelve varieties of this species in 'The Entomologist,' p. 254.

33. Agrotis adumbrata.

Picea; abdomen cinereum; alæ anticæ lineis undulatis transversis testaceis, macularum marginibus albidis, claviformi brevi, orbiculari subrotunda, linea exteriore e punctis albidis, guttis marginalibus nigris; posticæ cinereæ, litura discali margine latissimo obscurioribus.

Agrotis adumbrata, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842, 3; *Faun. Volg-Ural.* 191. *Herr.-Schæff. Schmett. Eur.* ii. pl. 25, f. 121. *Guén. Noct.* i. 287, 469.

South Russia.

34. Agrotis siliginis.

Cinereo-fusca; abdomen cinerascens; alæ anticæ guttis costalibus albidis, lineis transversis undulatis indistinctis, lunulis marginalibus nigris, maculis discalibus nigro ex parte marginatis, claviformi subobsoleta, orbiculari subovata magna aut parva, reniformi extus excavata, linea transversa submarginali albida nonnunquam subobsoleta; posticæ maris *albæ,* fœm. *cinereæ.*

Agrotis siliginis, *Friw. MSS. Guén. Ann. Soc. Ent. Fr.* 240; *Noct.* i. 287, 470.
Agrotis seliginis, *Dup. Hist. Nat. Lép. Fr.* iii. 211, pl. 19, f. 6.
Agrotis segnilis, *Boisd. Ind. Méth.* 110, 837.
Noctua eruta? *Hübn. Samml. Eur. Schmett. Noct.* f. 623.
Epipsilia eruta? *Hübn. Verz. Schmett.* 210, 2101.

Hungary. Balkan Mountains.

a. Europe. From Mr. Milne's collection.
b, c. Europe. From M. Becker's collection.

35. Agrotis Tritici.

Fusco-cinerea; abdomen testaceum; alæ anticæ lunulis marginalibus nigris, orbiculari et reniformi albido nigroque marginatis, illa subelliptica, macula postica fusiformi nigro marginata, fascia exteriore albida indistincta; posticæ cinerascentes, margine fuscescente, ciliis albis.

——— ———, *Frisch, Ins.* 10, pl. 19. *Bjuk. Act. Stockh.* 1778, 4, 13.

Phalæna-Noctua Tritici, *Linn. Faun. Suec.* 1211. *Gmel. ed. Syst. Nat.* i. 5, 2574, 179.

Noctua Tritici, *Bork. Eur. Schmett.* iv. 51.

Agrotis Tritici, *Treit. Schmett. Eur.* vi. 137, 7? *Boisd. Icon. Lép. d'Eur.* pl. 77, f. 2, 3; *Ind. Méth.* 110, 836. *Steph. Ill. Brit. Haust.* ii. 121. *Guén. Noct.* i. 288, 471.

Noctua aquilina, *God. Hist. Nat. Lép. Fr.* ii. pl. 64, f. 6, 7.

Noctua eruta? *Hübn. Samml. Eur. Schmett. Noct.* pl. 136, f. 623.

Noctua pratincola, *Bork. Eur. Schmett. Noct.* iv. 553, 225. *Hübn. Schmett. Eur. Noct.* pl. 123, f. 567.

Noctua fictilis, *Hübn. Schmett. Eur. Noct.* pl. 101, f. 479.

Noctua recussa? *Hübn. Schmett. Eur. Noct.* pl. 138, f. 630.

Metaxya Tritici, *Hübn. Verz. Schmett.* 223, 2237.

Noctua (Agrotis) Tritici, *Meig. Syst. Besch.* iii. 84, 5, pl. 94, f. 5.

a—bb. England. From Mr. Stephens' collection.

cc. Scotland. From Mr. Foxcroft's collection.

dd—ff. England.

gg—jj. Europe. From M. Becker's collection.

kk. Orilla, West Canada. From Mr. Bush's collection.

ll—qq. Nova Scotia. From Lieut. Redman's collection.

rr—ww. Trenton Falls, New York. Presented by E. Doubleday, Esq.

The American specimens differ much from each other, but belong to Guénée's fourth variety of the species. Bentley has described twelve varieties of this species in 'The Entomologist,' p. 256.

36. Agrotis aquilina.

Cervina; thorax linea transversa antica plagisque duabus lateralibus nigro-fuscis; abdomen testaceum; alæ anticæ apud costam albido conspersæ, vena mediana albida, lunulis marginalibus nigris, disco ex parte strigisque exterioribus lanceolatis fuscis, maculis nigro albidoque marginatis, claviformi elongata, orbiculari et reniformi variis irregularibus, fascia exteriore albida e strigis lanceolatis; posticæ albidæ aut subcinereæ, margine fuscescente, ciliis albis.

Noctua aquilina, *Wien. Verz.* 80, 6. *Bork. Eur. Schmett.* 156 *Hübn. Samml. Eur. Schmett. Noct.* pl. 29, f. 135; pl. 115, f 535. *God. Hist. Nat. Lép. Fr.* v. 218.
Agrotis aquilina, *Treit. Schmett. Eur.* v. 1, 134, 6. *Boisd. Ind Méth.* 110, 841. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i 289, 472.
Noctua domestica? *Fabr. Ent. Syst.* iii. 2, 23, 48.
Noctua nigrofusca, *Esp. Schmett.* iv. pl. 127, f. 6.
Var. Agrotis vitta, *Treit. Schmett.* v. 1, 132, 5. *Steph. Ill. Brit Ent. Haust.* ii. 120.
Noctua vitta, *Esp. Schmett.* pl. 143, f. 6. *Bork. Eur. Schmett.* iv 191? *Hübn. Eur. Schmett. Noct.* f. 533, 534. *God. Hist Nat. Lép. Fr.* v. pl. 64, f. 4, 5.
Noctua (Agrotis) vitta, *Meig. Syst. Besch.* iii. 83, 3, pl. 92, f. 12.
Metaxya aquilina, *Hübn. Verz. Schmett.* 223, 2236.
Noctua (Agrotis) aquilina, *Meig. Syst. Besch.* iii. 84, 4, pl. 93, f. 7.
Noctua Tritici, *God. Hist. Nat. Lép. Fr.* v. pl. 65, f. 4, 5.

a—s. England. From Mr. Stephens' collection.
t. Scotland. From Mr. Foxcroft's collection.
v—y. Europe. From M. Becker's collection.
z—aa. ———?

37. Agrotis recussa.

Mas. *Alæ anticæ cinereo-fuscæ, maculis duabus costaque cinereis, strigis transversis fuscis posticis albicantibus ad marginem fuscis; antennæ ciliatæ.* Fœm.—*Alæ anticæ fuscæ maculis duabus costaque cinereo-fuscis; posticæ albido-fuscæ ad marginem fuscæ; antennæ filiformes.*

Agrotis telifera, *Donzel, Ann. Soc. Ent. Fr.* vi. 471, 1, pl. 18, f. 1.
Noctua telifera, *Geyer, Samml. Eur. Schmett.* 878.
Noctua recussa, *Hübn. Samml. Eur. Schmett.* 630.
Agrotis recussa, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 458, pl. 40, f. 4. *Boisd. Ind. Méth.* 110, 839. *Herr.-Schæff. Schmett. Eur.* 21. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 291, 474.
Metaxya recussa, *Hübn. Verz. Schmett.* 223, 2240.

Basses-Alpes. Pyrenees. Valais.

a, b. Europe. From M. Becker's collection.

38. AGROTIS OBELISCA.

Fusca; abdomen cinereum; alæ anticæ maculis duabus subquadratis discalibus lineisque duabus transversis exterioribus punctatis nigris, maculis duabus subquadratis discalibus testaceis; posticæ albidæ, cinereo marginatæ.

——— ———, *Engr. Pap. d'Eur.* 445, a, b.

Noctua obelisca, *Wien. Verz.* 80, 5. *Hübn. Samml. Eur. Schmett.* 123. *Haw. Lep. Brit.* 177. *God. Hist. Nat. Lép. Fr.* v. 214, pl. 64, f. 3.

Agrotis obelisca, *Treit. Schmett. Eur.* v. 1, 143, 9. *Steph. Ill. Brit. Ent. Haust.* ii. 124? *Boisd. Ind. Méth.* 110, 840. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 291, 475.

Noctua pratincola, *Hübn. Samml. Eur. Schmett.* 567. *Bork. Eur. Schmett.* 225.

Metaxya obelisca, *Hübn. Verz. Schmett.* 223, 2235.

Bombyx molothina, *Esp. Schmett.* iii. pl. 85, f. 1.

Noctua (Agrotis) obelisca, *Meig. Syst. Besch.* iii. 86, 8, pl. 92, f. 10.

a—g. England. From Mr. Stephens' collection.
h. England.
i—m. Europe. From M. Becker's collection.
n, o. ———?
p—v. Nova Scotia. From Lieut. Redman's collection.
u. ———?

Var. Mas. *Alæ anticæ ochraceo-cinereæ, maculis duabus costaque albicantibus; posticæ albæ; antennæ pectinatæ, apice filiformes.* Fœm.—*Alæ anticæ cinereo-fuscæ, posticæ ad marginem late infuscatæ; antennæ filiformes.*

Agrotis Villiersii, *Guén. Ann. Soc. Ent. Fr.* vi. 173, pl. 8, f. 1, 2. *Geyer, Samml. Eur. Schmett.* 869, 870.

Agrotis obelisca, *var.* C. Villiersii, *Guén. Noct.* i. 292. *Boisd. Ind. Méth.* 110.

Central France. Hungary. Several parts of Germany.

Var. Mas. *Alæ anticæ obscure fuscæ, vitta costali alba lata, maculis duabus ordinariis albidis; posticæ albæ, apice nudæ.* Fœm.—*Alæ anticæ rufo-cinereæ, vitta costali albida lata, maculis duabus ordinariis albidis.*

Agrotis hastifera, *Donzel, Ann. Soc. Ent. Fr. 2me Sér.* v. 525, 1, pl. 8, No. 1, f. 1, 2.

Agrotis obelisca, *var.* A. hastifera, *Guen. Noct.* i. 291.

Digne.

Var.? *Alæ anticæ obscure fuscæ margine apicali maculisque subquatuor nigris, ultima costali; posticæ albidæ, margine fuscescente.*

Agrotis tetrastigma, *Zett. Ins. Lapp.* 935, 3.

Norwegian Lapland.

39. Agrotis molothina.

Mas. *Rufescente-cinerea; antennæ pectinatæ; abdomen pallide cinereum; alæ anticæ basi, maculis fasciisque undulatis cinereis, maculis duabus (una costali, altera inter orbicularem et reniformem) nigris, claviformi elongata, orbiculari magna subrotunda; posticæ albidæ, margine cinereis.*

——— ———, *Engr. Pap. d'Eur.* vii. 58, f. 444, a.

Noctua molothina, *Esp. Schmett.* pl. 85, f. 1?

Chersotis Ericæ, *Boisd. Ind. Méth.* 104, 771. *Guén. Ann. Soc. Ent. Fr.* vi. 240.

Agrotis velum, *Herr.-Schæff. Schmett. Eur.* ii. pl. 6, f. 30.

Agrotis molothina, *Guén. Noct.* i. 294, 480.

Central France.

40. Agrotis agathina.

Rufescens; caput et thorax anticus flava; abdomen fusco-cinereum; alæ anticæ vitta antica fasciisque undulatis flavis, his cinereo marginatis, macula inter orbicularem et reniformem nigrum, hanc flavo-marginatum, illam flavam; posticæ pallide fuscescentes, lunula lineaque discalibus cinereis.

Agrotis agathina, *Dup. Hist. Nat. Lép. Fr.* iv. 359, pl. 122, f. 2. *Herr.-Schæff. Schmett. Eur.* ii. pl. 1, f. 2. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 294, 479.

Chersotis agathina, *Boisd. Ind. Méth.* 104, 770.

Agrotis Lidia, *Boisd. Ind. Méth. ed.* 1; *Icon. Lép. d'Eur.* pl. 77, f. 1.

Lytæa albimacula, *Steph. Ill. Brit. Haust. Suppl.* ii. 137, pl. 19, f. 3.

Var. Lytæa leucographa, *Steph. Ill. Brit. Ent. Haust.* ii. 199.

a—e. England. From Mr. Stephens' collection.

Group 6.

41. Agrotis signifera.

Cervino-cinerea; thorax nigro fasciatus; abdomen albido-testaceum; alæ anticæ striga basali lunulisque marginalibus nigris, lineis transversis undulatis indistinctis, lituris costalibus strigaque discali fuscis, maculis nigro marginatis, claviformi lanceolata, orbiculari subovata aut fusiformi, reniformi angusta sublunata; posticæ maris *albæ, margine fuscescente,* fœm. *cinereæ, basi pallidiores, ciliis albis.*

———, *Engr. Pap. d'Eur.* 381, C.

Noctua signifera, *Wien. Verz.* 80, 9. *Fabr. Ent. Syst.* iii. 2, 71, 202. *Bork. Eur. Schmett.* 226. *Hübn. Samml. Eur. Schmett. Noct.* f. 132.

Agrotis signifera, *Treit. Schmett. Eur.* i. 171. *God. Hist. Nat. Lép. Fr.* ii. 230, pl. 66. *Frey. Beit. Ges. Eur. Schmett.* pl. 70; *Neu. Beit. Schmett.* ii. pl. 161. *Boisd. Ind. Méth.* 110, 843. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 298, 488.

Ogygia signifera, *Hübn. Verz. Schmett.* 225, 2254.

a—c. Europe. From M. Becker's collection.

42. Agrotis forcipula.

Cinerea; abdomen canum; alæ anticæ lineolis paucis discalibus et submarginalibus nigris, ocellis duobus ex parte albis nigro marginatis; posticæ cinereæ, ciliis albidis fusco fasciatis.

Noctua forcipula, *Wien. Verz.* 14. *Hübn. Samml. Eur. Schmett. Noct.* f. 128, 547. *God. Hist. Nat. Lép. Fr.* ii. 228, pl. 66. *Frey. Neu. Beit. Schmett.* ii. pl. 160.

Agrotis forcipula, *Treit. Schmett. Eur.* i. 168. *Boisd. Ind. Méth.* 110, 844. *Guén. Ann. Soc. Ent. Fr.* vi. 246; *Noct.* i. 298, 489.

Noctua denticulosa, *Esp. Schmett.* pl. 183, f. 3.

Ogygia forcipula, *Hübn. Verz. Schmett.* 225, 2256.

South and East Europe.

Var? *Alæ anticæ subcinereæ, cæsio induta, strigis duabus ordinariis crenatis nigricantibus, striga submarginali obsoleta maculisque ordinariis obsoletis lutescentibus, puncto nigro sub macula rotunda; alæ posticæ nigricantes, ad basin pallidæ.*

Agrotis Forficula, *Eversmann, Bull. Soc. Imp. Nat. Mosc.* 1851 xxiv. No. 2, 629, 17.

Georgia in Asia.

43. AGROTIS SAGITTIFERA.

Cana; tarsi antice nigri, albo fasciati; alæ anticæ vitta dislocata discali, lituris costalibus strigisque exterioribus nigris, maculis orbiculari et reniformi albidis indistinctis; posticæ albæ, venis apice fuscis.

Noctua sagittifera, *Hübn. Samml. Eur. Schmett.* 532, 848. *God. Hist. Nat. Lép. Fr.* ii. 232, pl 66. *Frey. Neu. Beit. Schmett.* ii. pl. 148, f. 2.

Agrotis sagittifera, *Treit. Schmett. Eur.* i. 172. *Boisd. Icon. Lép. d'Eur.* pl. 75, f. 4; *Ind. Méth.* 104, 775. *Dup. Hist. Nat. Lep. Fr. Suppl.* iii. 154, pl. 15. f. 2. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 299, 490.

Lithophane sagittifera, *Hübn. Verz. Schmett.* 242, 2411.

a. Europe. From M. Becker's collection.

North America.

Group 1.

Like the first European group.

A. Thorax canus. - - - - - - malefida, *Guén.*
B. Thorax non canus.
  A. Thorax pilis albidis. - - - - - patula, *Walk.*
  B. Thorax pilis nullis albidis.
    A. Thorax testaceus. - - - - - venerabilis, *Walk.*
    B. Thorax cervinus. - - - - - - insignata, *Walk.*
    C. Thorax non testaceus nec cervinus.
      a. Alæ posticæ *maris* cinereæ.
        i. Alæ anticæ non albo venosæ.
          * Alæ anticæ basi nigro non maculatæ. jaculifera, *Guén.*
          ** Alæ anticæ lituris basalibus nigris. hæsitans, *Walk.*
        ii. Alæ anticæ venis duabus albis. - divergens, *Walk.*
      b. Alæ posticæ *maris* pallide cervinæ. - incallida, *Walk.*
      c. Alæ posticæ *maris* albæ, margine fuscescente. spissa, *Guén.*
      d. Alæ posticæ *maris* albæ. - - - annexa, *Treit.*

44. Agrotis spissa.

Fusco-cervina, cinereo varia; thorax fusco fasciatus; abdomen canescens; alæ anticæ lituris costalibus, lineis transversis angulatis et macularum marginibus nigricantibus, claviformi obsoleta, orbiculari magna subelliptica, reniformi latiuscula; posticæ maris *albæ, margine fuscescente,* fœm. *fuscescentes basi albidæ.*

Agrotis spissa, *Guén. Noct.* i. 261, 415.

a, b. United States. Presented by E. Doubleday, Esq.
c—k. Nova Scotia. From Lieut. Redman's collection.

45. Agrotis jaculifera.

Subcervina; thorax fascia antica; abdomen albido-testaceum; alæ anticæ maculis nigro marginatis, claviformi longissima, orbiculari lanceolata albida, reniformi sublunata testacea. Mas. —*Alæ anticæ rufescente canæ, disco ex parte margineque exteriore fuscis nigro strigatis; posticæ albidæ, margine fusco.* Fœm.—*Alæ anticæ rubido-fuscæ, disco ex parte, linea transversa undulata margineque exteriore nigris; posticæ cinereæ, basi albidæ.*

Agrotis jaculifera, *Guén. Noct.* i. 262, 417.

Canada.

a—n. Trenton Falls, New York. Presented by E. Doubleday, Esq.
o—r. New York. From Mr. Milne's collection.

46. Agrotis divergens.

Mas. *Rufo-fusca; thorax antice fusco fasciatus; abdomen pallide testaceum; alæ anticæ venis duabus albis, disco apud maculas nigricante, orbiculari et reniformi cinereis, illa elliptica oblonga, claviformi lanceolata, linea transversa cinerea guttisque nigricantibus exterioribus; posticæ cinereæ, fuscescente marginatæ.*

Male. Reddish brown. Thorax with a dark brown band. Abdomen pale testaceous. Fore wings with two white lines on the veins, united at the base, including a blackish space, which contains the cinereous black-bordered orbicular and reniform spots; orbicular spot elliptical, oblong; reniform with the usual form; clavi-

form lanceolate, slight; an exterior transverse cinereous line, along which there are some blackish dots. Hind wings cinereous, with brownish borders. Length of the body 5 lines; of the wings 1[illegible] lines.

a—d. Nova Scotia. From Lieut. Redman's collection.

47. Agrotis malefida.

Cana; thoracis latera antica nigro varia; alæ anticæ nigro-cinereæ albido conspersæ et strigatæ, maculis solitis nigro-marginatis; posticæ albæ, opalinæ, semihyalinæ, venis apice infuscatis.

Agrotis malefida, *Guén. Noct.* i. 267, 429.

a, *b*. E. Florida. Presented by E. Doubleday, Esq.

48. Agrotis annexa.

Cervina; abdomen pallide testaceum; alæ anticæ striga costali subapicali, striga basali strigaque inter maculas reniformem et orbicularem nigricantibus; posticæ albæ, opalinæ, semihyalinæ.

Agrotis annexa, *Treit. Schmett. Eur.* i. 154; *Suppl.* x. 22. *Steph. Ill. Brit. Haust.* ii. 117, pl. 22, f. 2. *Boisd. Ind. Méth.* ed. 1, 64. *Guén. Noct.* i. 268, 430.

a. United States. Presented by E. Doubleday, Esq.
b—e. East Florida. Presented by E. Doubleday, Esq.
f, *g*. St. Domingo. From Mr. Tweedie's collection.
h. St. Domingo. Presented by Dr. Gilbert.
i. Jamaica.
j. Port Natal. From Dr. Krauss' collection.

49. Agrotis venerabilis.

Mas. *Testacea; caput et thoracis latera albido pilosa; thorax antice nonnunquam nigro fasciatus; alæ anticæ apud costam fuscescentes, maculis nigro marginatis, orbiculari fusiformi, reniformi subelliptico, striga postica duplicata nigra; posticæ cinereæ.*

Male. Testaceous. Head and sides of the thorax more or less whitish. Thorax occasionally with blackish bands in front. Fore wings brownish in front; discal spots with black borders;

orbicular spot fusiform; reniform spot subelliptical, hardly contracted in the middle; a double black streak behind the orbicular spot. Hind wings cinereous. Length of the body 6—6½ lines; of the wings 14—15 lines.

a—d. Nova Scotia. From Lieut. Redman's collection.

e. ———?

50. Agrotis patula.

Mas. *Cervina; antennæ mediocriter pectinatæ; thorax pilis nonnullis albidis; abdomen basi pallidum; alæ anticæ latiusculæ, lituris nigricantibus, claviformi elongata, orbiculari subpyriformi, lineis duabus exterioribus transversis angulosis, lunulisque marginalibus; posticæ pallide cinereo-cervinæ.*

Male. Fawn-colour. Antennæ moderately pectinated. Thorax with some whitish hairs. Abdomen paler towards the base. Fore wings rather broad, with the usual marks blackish; claviform spot elongate; orbicular subpyriform; reniform as usual; two exterior transverse zigzag lines, and a row of marginal lunules. Hind wings pale cinereous fawn-colour. Length of the body 7 lines; of the wings 16 lines.

a. Rocky Mountains. Presented by the late Earl of Derby.

51. Agrotis hæsitans.

Mas. *Obscure cervina; palpi fusci; antennæ nigræ, mediocriter pectinatæ; abdomen pallidum; alæ anticæ lituris basalibus, striga discali, strigis exterioribus, fascia incompleta, macula subquadrata, lunulisque marginalibus nigris, orbiculari et reniformi indistinctis; posticæ cinereæ, margine fuscescente, ciliis albidis.*

Male. Dull fawn-colour. Palpi brown. Antennæ black, moderately pectinated. Abdomen much paler than the thorax. Fore wings with black marks at the base, with a slight black streak in the disk, with an incomplete black band, with exterior black streaks, and with black marginal lunules; a black subquadrate spot between the orbicular and reniform spots which are indistinct. Hind wings cinereous, brownish towards the border; ciliæ whitish. Length of the body 6 lines; of the wings 14 lines.

a. United States. Presented by E. Doubleday, Esq.

52. Agrotis incallida.

Fœm. *Pallide cervina; caput et thorax anticus fuscescentia alæ anticæ costam versus et apud marginem exteriorem fuscescentes, maculis discalibus nigro marginatis, claviform elongata, orbiculari pyriformi, reniformi angusta lunata testacea.*

Female. Dull pale fawn-colour. Head and fore part of the thorax brownish. Fore wings brownish on most of the fore half and along the exterior border; discal spots mostly bordered with black; claviform elongate; orbicular pyriform, its broad end towards the reniform, which is narrow, lunate, and mostly pale testaceous. Length of the body 7 lines; of the wings 16 lines.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

53. Agrotis insignata.

Fœm. *Cervina; abdomen cinerascens; alæ anticæ lineis transversis duplicatis undulatis ad costam dilatatis nigricantibus orbiculari et reniformi nigricantibus testaceo marginatis, hac extus valde excavata, illa subrotunda; posticæ subcinereæ, ciliis albido marginatis.*

Female. Fawn-colour. Abdomen more cinereous. Fore wings with distinct transverse double undulating blackish lines which are somewhat dilated on the costa; orbicular and reniform spots blackish, with pale testaceous borders, the former nearly round, about half the size of the latter, which is much excavated on the outer side. Hind wings cinereous; ciliæ with whitish tips. Length of the body 7 lines; of the wings 16 lines.

a. b. Nova Scotia. From Lieut. Redman's collection.

Group 2.

Like the third European group.

54. Agrotis incivis.

Mas. *Albida; palpi subtus nigro-fusci; thorax fascia antica nigro-fusca; alæ anticæ rufo nigroque subconspersæ, fascia marginali rufescente lineam undulatam guttasque marginales albidas includente, maculis orbiculari et reniformi nigro alboque variis; posticæ albæ, opalinæ, semihyalinæ, margine angusto fuscescente.*

Agrotis incivis, *Guén. Noct.* i. 274, 441.
Agrotis infecta, *Ochs. Nachtr.* 67, 8.
Noctua præcox, *Hübn. Samml. Eur. Schmett.* 359. *Oliv. Enc. Méth.* 330. *Dup. Hist. Nat. Lép. Fr.* iii. 20, pl. 73, f. 1.
Hapalia infecta, *Hübn. Verz. Schmett.* 220, 2205.

b—c. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.
d. St. Domingo. From Mr. Tweedie's collection.
e f. ———? From Mr. Milne's collection.

Group 3.

Like the fifth European group.

55. Agrotis obeliscoides.

Subcervina; thorax fascia antica nigra, postice piceus; abdomen albido-testaceum; alæ anticæ striga discali margineque exteriore late rubidis, costa albida, macula claviformi lanceolata lineisque transversis nigris, orbiculari et reniformi testaceo-albidis cervino pupillatis, hac sublunata, illa elliptica obliqua; posticæ pallide cinerascentes, margine fusco.

Agrotis obeliscoides, *Guén. Noct.* i. 293, 477.

a. United States. Presented by E. Doubleday, Esq.

56. Agrotis mollis.

Fœm. *Cana; thorax ferrugineo fuscoque fasciatus; abdomen cinereum; alæ anticæ ferrugineæ, lineis transversis canis nigrisque, exteriore arcuata, submarginali undulata, striga brevi discali atra, orbiculari subovata, reniformi vix excavata.*

Noctua mollis, *Barnston, MSS.*

Female. Hoary. Thorax with ferruginous and brown bands. Abdomen and hind wings cinereous. Fore wings mostly ferruginous; the usual transverse lines hoary and blackish, and very distinct; the exterior one curved, the submarginal one undulating; a short discal deep black streak extending to the reniform spot and interrupted by the orbicular one; the latter is irregularly oval, and not much smaller than the reniform, which is hardly excavated. Length of the body 7 lines; of the wings 14 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

57. Agrotis perlentans.

Mas. *Fusca; antennæ simplices aut vix ciliatæ; abdomen cinereum; alæ anticæ striga discali interrupta nigricante, orbiculari et reniformi indistinctis pallido marginatis; posticæ cinereæ, macula discali margineque fuscescentibus.*

Male. Brown. Antennæ simple or hardly ciliated. Abdomen cinereous. Fore wings with a blackish streak between the base and the orbicular spot, and between the latter and the reniform spot; spots indistinct, with pale borders. Hind wings cinereous, with a brownish discal spot, and brownish borders. Length of the body 6 lines; of the wings 14 lines.

a. New York. Presented by E. Doubleday, Esq.

58. Agrotis radix.

Ferrugineo-fusca; thorax nigro fasciatus; abdomen cinereum, lateribus ferrugineis; alæ anticæ lineis nonnullis transversis undulatis pallidioribus et obscurioribus, linea submarginali angulosa albida, striga basali lunulisque marginalibus nigris, orbiculari et reniformi obscuriore marginatis, hac maxima, illa subovata; posticæ cinereæ, marginibus obscurioribus. Mas.—*Antennæ ciliatæ; abdomen valvulis apicalibus magnis luteo pilosis.*

Noctua radix, *Barnston, MSS.*

Ferruginous-brown. Thorax with a black band. Abdomen cinereous, ferruginous along each side. Fore wings with several transverse undulating paler and darker lines, the submarginal line angulose and whitish; a black basal streak, and black marginal lunules; orbicular and reniform spots with darker borders, the former irregularly oval, about half the size of the latter, which is very large. Hind wings cinereous, with darker borders. *Male.*—Antennæ ciliated. Abdomen with large apical valves, whose hairs are somewhat luteous. Length of the body 6 lines; of the wings 16 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

b. Nova Scotia. From Lieut. Redman's collection.

Group 4.

Like the sixth European group.

59. Agrotis imperita.

Mas. *Cinerea; alæ anticæ strigulis undulosis transversis albidis nigro marginatis, litura discali ciliaque fulvis; posticæ subcinereæ, basi pallidiores.*

Agrotis imperita (Noctua genuina, Graphiphora obsoleta), *Hübn. Samml. Exot. Schmett.* iii. 16, 224, f. 447, 448.

Labrador.

West Indies.

Group 1.

Like the first European group.

60. Agrotis decernens.

Mas. *Fusca; abdomen pallide fuscum, marginibus basique albidis; alæ anticæ cervinæ, strigis lanceolatis fuscis, maculis duabus (una basali, altera subapicali) nigro-fuscis, macula fusca pallidiore submarginali, macula inter orbicularem et reniformem nigricante, claviformi lanceolata, orbiculari parva rotunda; posticæ albæ, opalinæ.*

Male. Brown. Abdomen pale brown; hind borders of the segments and base whitish. Fore wings fawn-colour, with lanceolate brown streaks, with a blackish brown spot near the base, and another near the tip of the costa; a paler brown spot in front of the middle of the exterior border, and a blackish spot between the orbicular and the reniform, which, like the others, is bordered with black; claviform lanceolate; orbicular small, round; reniform of the usual shape. Hind wings white, opaline. Length of the body 7 lines; of the wings 16 lines.

a. St. Domingo. From Mr. Stevens' collection.

South America.

Group I.

Like the first European group.

61. Agrotis inspinosa.

Fœm. A. suffusæ *affinis, major; caput, palpi et thorax antice flavescentia; alæ anticæ postice cinerascentes, lineis medianis optime determinatis valde remotis, macula reniformi rotunda obscura; posticæ albæ, semihyalinæ, fusco minus inquinatæ.*

Agrotis inspinosa, *Guén. Noct.* i. 269, 432.

Brazil.

62. Agrotis bipars.

Fœm. *Obscure cinerea; abdomen canum; pectus pilis longis albidis vestitum; alæ anticæ apud marginem exteriorem pallide cinereæ, maculis discalibus nigro marginatis, claviformi elongata, orbiculari pyriformi subquadrata, strigis exterioribus nigris lanceolatis; posticæ albæ, apice subfuscescentes.*

Female. Dark gray. Abdomen hoary. Pectus clothed with long whitish hairs. Fore wings pale gray for nearly one-third of the length from the exteriör border; discal spots bordered with black; claviform elongate; orbicular pyriform, attenuated towards the reniform, which is subquadrate, and is accompanied by a short black streak, the latter being nearly parallel to the inner side of the pyriform; a row of exterior black lanceolate streaks. Hind wings white; their tips slightly tinged with brown. Length of the body 7 lines; of the wings 16 lines.

a. Venezuela. From Mr. Dyson's collection.

63. Agrotis consueta.

Cervina (mas) *aut cinerea* (fœm.); *thorax antice nigro fasciatus; abdomen testaceum; alæ anticæ apud costam obscuriores, lituris basalibus lineisque duabus duplicatis transversis undulatis nigris, claviformi nigra elongata, orbiculari longa angusta, albido marginata, reniformi magna nigricante, strigis submarginalibus lanceolatis* maris *albidis,* fœm. *cinereis; posticæ albæ,* fœm. *apud margines fuscescentes.*

Fawn-colour (male) or cinereous (female). Thorax with a black band in front. Abdomen testaceous. Fore wings darker along the costa, with some black marks near the base, and with two double transverse undulating black lines, one towards the base, the other exterior; claviform spot elongate, mostly black; orbicular long and narrow, with a whitish border; reniform large, of the usual form, mostly blackish; submarginal streaks lanceolate, whitish in the male, cinereous in the female. Hind wings white, brownish about the borders in the female. Length of the body 8 lines; of the wings 18 lines.

a—c. Venezuela. From Mr. Dyson's collection.

Group 2.

Like the third European group.

64. AGROTIS IGNICANS.

Mas et fœm. *Sordide ochraceo-flava; thorax antice* maris *niger*, fœm. *rufescens; alæ anticæ nigro conspersæ, apud marginem exteriorem rufo-ferruginea, lineis duabus medianis e punctis nigris, reniformi e macula ferruginea, lituris aliis obsoletis; posticæ albæ, opalinæ, semihyalinæ, margine obscuriore.*

Agrotis ignicans, *Guen. Noct.* i. 274, 440.

Brazil.

Var.? Mas. *Pallide cervina; antennæ simplices; thorax antice atro fasciatus; abdomen testaceum; alæ anticæ atro conspersæ, margine exteriore fuscescente, claviformi et orbiculari obsoletis, reniformi e guttis nonnullis nigris, linea exteriore e guttis nigris; posticæ albæ, marginibus angustis pallide fuscis.*

Male. Pale bright fawn-colour. Antennæ simple. Thorax with a deep black band in front. Abdomen testaceous. Fore wings minutely speckled with black, brownish along the exterior border; claviform and orbicular spots obsolete; reniform composed of some black dots; an exterior row of black dots. Hind wings white, with narrow pale brown borders. Length of the body 7 lines; of the wings 16 lines.

a. Venezuela. From Mr. Dyson's collection.

65. Agrotis anteposita.

Var.? *Fusco-cervina; thorax fasciis anticis vittisque duabus nigris; abdomen albido-testaceum; alæ anticæ venis strigaque costali subapicali nigricantibus, maculis orbiculari et reniforme lineisque transversis angulosis pallide cervinis nigro marginatis, macula orbiculari subrotunda, reniformi lunari; posticæ albæ, opalinæ, venis nonnunquam apice infuscatis.*

Agrotis anteposita, *Guén. Noct.* i. 278, 449.

Monte Video.

a. Honduras. From Mr. Dyson's collection.
b. Venezuela. From Mr. Dyson's collection.

Group 3.

Like the fourth European group.

66. Agrotis Pesronii.

A. cinereæ *affinis, minor; antennæ validæ, minus ciliatæ; alæ anticæ albidiore cinereæ, magis nitentes, disco subviolacea lineis duabus medianis latioribus minus æqualiter undulatis punctis marginalibus nigris, macula costali apicali.*

Agrotis Pesronii, *Guén. Noct.* i. 282, 459.

Straits of Magellan.

67. Agrotis differens.

Mas. *Ferrugineo-fusca; antennæ subsetosæ; thorax postice albido hirtus; abdomen pallide fuscum, basi albidum; alæ anticæ maculis costalibus pallidioribus et nigricantibus, lunulis marginalibus nigricantibus, lituris aliis obsoletis; posticæ albæ, marginibus fuscescentibus.*

Male. Ferruginous-brown. Antennæ minutely setose. Thorax with whitish hairs hindward. Abdomen pale brown, whitish towards the base. Fore wings with paler and blackish spots along the costa, and with blackish marginal lunules; all the other marks obsolete. Hind wings white, with brownish borders. Length of the body 8 lines; of the wings 16 lines.

a. Venezuela. From Mr. Dyson's collection.

68. Agrotis bilitura.

Mas. *Ochraceo-alba; antennæ pubescentes; alæ anticæ nigro conspersæ, strigis duabus (una basali, altera discali) nigris, maculis lineisque omnino obsoletis.*

Agrotis bilitura, *Guen. Noct.* i. 285, 467.

Chili.

Group 4.

Like the fifth European group.

69. Agrotis Gypætina.

Mas. *Robusta; antennæ validæ, sat crenulatæ; abdomen crassum, pilosum; alæ anticæ nigro-fuscæ, violaceo subtinctæ, margine venaque mediana basi albis, striga discali nigra e maculis orbiculari et reniformi interrupta, lineis transversis subalbidis; posticæ albæ, margine venisque nigricantibus.*

Agrotis Gypætina, *Guen. Noct.* i. 290, 473.

Monte Video.

70. Agrotis hispidula.

Fœm. *Testaceo-cinerea, villosa; thorax fusco bistrigatus; abdomen crassum, depressum, obtusum; alæ anticæ margine pallidiores, orbiculari et reniformi subcontiguis ochraceo-albis nigro marginatis, reniformi angusta, orbiculari ovata, lineis duabus medianis pallidis indistinctis; posticæ albidæ.*

Agrotis hispidula, *Guen. Noct.* i. 293, 476.

Chili.

Group 5.

Like the sixth European group.

71. Agrotis impacta.

Cinereo-fusca; thorax antice cervinus fusco fasciatus; abdomen canum; alæ anticæ fusco subconspersæ, lineis transversis indistinctis duplicatis, undulatis fuscis macula orbiculari magna elliptica testacea, reniformi obscure fusca testaceo marginata, lunulis marginalibus nigricantibus; posticæ pallide cinereis, margine fuscescente.

Cinereous-brown. Thorax somewhat fawn-coloured and with brown bands in front. Abdomen hoary. Fore wings slightly speckled with brown, with indistinct transverse double undulating brown lines; claviform spot obsolete; orbicular elliptical, testaceous, nearly as large as the reniform, which is formed as usual, and is dark brown, with a testaceous border; marginal lunules blackish. Hind wings pale cinereous, brownish about the borders. Length of the body 7 lines; of the wings 16 lines.

a, *b*. Venezuela. From Mr. Dyson's collection.
c. Rio Janeiro. From Mr. Stevens' collection.

72. Agrotis intecta.

Mas. *Cervina; antennæ subcrenulatæ; abdomen cinereum, apice cervinum; alæ anticæ fusco dense conspersæ; posticæ albidæ, marginibus fuscescentibus.*

Male. Fawn-colour. Antennæ minutely crenulate. Abdomen cinereous; apical tuft fawn-colour. Fore wings with brown speckles, which are frequently confluent, except along the costa; the usual spots almost obsolete. Hind wings whitish, brownish along the borders. Length of the body 8 lines; of the wings 18 lines.

a—*c*. Monte Video. Presented by C. Darwin, Esq.

73. Agrotis? Epopea.

Cervino-testacea; abdomen cervino fuscum; alæ anticæ maculis variis costalibus fasciaque lata exteriore postice abbreviata nigro-fuscis albido marginatis; posticæ cervino-fuscæ, basi cervino-testaceæ.

Phalæna-Noctua Epopea, *Cram. Pap. Exot.* iii. 144, pl. 272, f. G, H.

Surinam.

Africa.

Group 1.

Like the first European group.

74. Agrotis Lipara.

Alæ anticæ supra fusco-rufescentes, macula orbiculari subrotundata in medio fusca, lineolis sagittatis ad marginem in serie transversa; posticæ fuscæ ad basim pallidiores.

Agrotis Lipara, *Rambur, Ann. Soc. Ent. Fr. 2me Sér.* vi. 68. *Guen. Noct.* i. 260, 412.

Algeria.

75. AGROTIS SPICULIFERA.

Cinereo-testacea; abdomen albido-testaceum; alæ anticæ striga discali fusca, macula basali pallide cervina, maculis discalibus nigro marginatis, claviformi et orbiculari lanceolatis, reniformi apud marginem exteriorem incisa, strigis exterioribus fuscis, lunulis marginalibus nigris; posticæ albidæ, margine fuscescente.

Agrotis spiculifera, *Guen. Noct.* i. 266, 425.

a—c. South Africa. Presented by Dr. A. Smith.
d—f. Cape. From M. Dregé's collection.

76. AGROTIS SUBALBA.

Mas. *Albido-testacea, subtus albida; alæ anticæ fusco conspersæ, maculis reniformi et orbiculari magnis fusco ex parte marginatis, orbiculari subrotunda, reniformi subquadrata, lunulis marginalibus nigris, ciliis albidis; posticæ albæ.*

Male. Whitish testaceous, whitish beneath. Fore wings speckled with brown; reniform spot and orbicular spot large, incompletely bordered with brown; orbicular spot nearly round; reniform subquadrate, hardly larger than the orbicular; claviform obsolete; a row of black marginal points; ciliæ whitish. Hind wings white. Length of the body 7 lines; of the wings 16 lines.

a. Cape. From M. Dregé's collection.

77. AGROTIS MARGINALIS.

Fœm. *Nigro-fusca, cinereo tincta; abdomen albido-testaceum; lunulis marginalibus nigris, maculis discalibus nigro marginatis, claviformi lanceolata, orbiculari ovata, ciliis testaceis; posticæ albidæ, margine venisque infuscatis.*

Female. Blackish brown, with a cinereous tinge. Abdomen whitish testaceous. Fore wings with a row of little black marginal lunules; discal spots with black borders; claviform lanceolate; orbicular oval; reniform as usual; ciliæ testaceous. Hind wings whitish, brownish about the veins and along the borders. Length of the body 7 lines; of the wings 16 lines.

a. South Africa. Presented by Dr. A. Smith.
b. South Africa. From Mr. Argent's collection.

78. Agrotis obliviosa.

Mas et fœm. *Cervina; abdomen pallide testaceum; alæ anticæ lituris costalibus lineisque transversis duplicatis undulatis nigricantibus, maculis discalibus nigro marginatis, claviformi lanceolata, orbiculari parva ovata aut subrotunda, lunulis marginalibus nigris; posticæ* maris *albæ*, fœm. *albidæ.*

Male and female. Fawn-colour. Abdomen pale testaceous. Fore wings with blackish costal marks, and with double transverse undulating blackish lines; discal spots with black borders; claviform lanceolate, resting on the first band; orbicular oval or nearly round, much smaller than the reniform, which has the usual form; these marks are occasionally more or less obsolete, and especially so in the female; a row of black marginal lunules. Hind wings of the male white, of the female whitish. Length of the body 6—7 lines; of the wings 14—18 lines.

a—c. Cape. From M. Dregé's collection.
d—f. South Africa. Presented by Dr. A. Smith.

79. Agrotis inquieta.

Nigricans, subtus cinerea; antennæ subpectinatæ; abdomen cinereum; alæ anticæ lineis nonnullis transversis undulatis atris, orbiculari et reniformi subobsoletis; posticæ albæ.

Blackish, cinereous beneath. Antennæ slightly pectinated. Abdomen cinereous. Fore wings with several deep black undulating lines; orbicular and reniform spots almost obsolete. Hind wings white. Length of the body 6 lines; of the wings 14 lines.

a. South Africa. Presented by Dr. A. Smith.

Group 2.

Like the third European group.

80. Agrotis albifrons.

Mas et fœm. *Albida; thoracis discus nigricans; alæ anticæ cinereo nebulosæ, maculis tribus magnis costalibus et annulis duobus discalibus nigris; posticæ albæ.*

Eugraphe albifrons (Noctua genuina, Graphiphora perspicua), *Geyer, Zeitr. Samml. Exot. Schmett.* 17, 430, f. 859, 860.
Agrotis albifrons, *Guen. Noct.* i. 276, 445.

a, b. South Africa. Presented by Dr. A. Smith.
c, d. Port Natal. From M. Gueinzius' collection.

81. Agrotis rimosa.

Pallide cervina, nigro conspersa; thorax nigro fasciatus; abdomen pallide testaceum; alæ anticæ vix viridescente tinctæ, maculis costalibus nigris, orbiculari et reniformi magnis distinctis subrotundis nigro marginatis strigaque nigra connexis; posticæ albæ.

Agrotis rimosa, *Guen. Noct.* i. 277, 446.

a, b. Cape. From M. Dregé's collection.

82. Agrotis muscosa.

Mas. *Olivaceo-viridis; abdomen pallide viride; alæ anticæ lituris strigisque plurimis ocellisque duabus discalibus nigris, gutta una discali nonnullisque subapicalibus albis; posticæ sordide albidæ.*

Mentaxya muscosa (Noctua genuina, Graphiphora perspicua), *Geyer, Zeitr. Samml. Exot. Schmett.* 10, 414, f. 827, 828.
Agrotis muscosa, *Guen. Noct.* i. 277, 447.

South Africa.

83. Agrotis Bilix.

Mas. *Testaceo-lutea; alæ anticæ nigro conspersæ, rufescente variæ, lineis duabus medianis e punctis nigris, maculis distinctis nigris, orbiculari parva rotunda, claviformi obsoleta; posticæ albæ.*

Agrotis Bilix, *Guen. Noct.* i. 277, 448.

Cape.

84. Agrotis cinchonina.

Fœm. A corticeæ *affinis. Nigro-fusca; pedes rufescente cincti; alæ anticæ nebulosæ, rufescente variæ, maculis claviformi orbiculari et reniformi magnis approximatis, lineis duabus medianis duplicatis indistinctis, ciliis rufescentibus; posticæ nigro-cinereæ, ciliis incarnatis.*

Agrotis cinchonina, *Guen. Noct.* i. 281, 456.

Abyssinia.

Group 3.

Like the fourth European group.

85. Agrotis lanidorsa.

Fusco-cinerea; antennæ ad apices pectinatæ, fasciculo basali albido; alæ anticæ squamosæ, albido variæ, lineis duabus medianis duplicatis albidis, strigis submarginalibus lanceolatis, orbiculari et reniformi subobsoletis, ciliis latissimis; posticæ obscure cinereæ, linea ciliisque pallidis.

Agrotis lanidorsa, *Guen. Noct.* i. 283, 460.

Cape.

Group 4.

Like the fourth European group.

86. Agrotis dividens.

Mas. *Cervina; antennæ vix crenulatæ; thorax fascia rufescente; abdomen testaceum; alæ anticæ ex parte rufescentes nigro conspersæ, lineis duabus transversis undulatis incompletis nigris, orbiculari et reniformi subellipticis cinereo pupillatis nigro marginatis, claviformi obsoleta; posticæ albæ, subtus antice testaceæ.*

Male. Fawn-colour. Antennæ hardly crenulate. Thorax with a reddish band. Abdomen testaceous. Fore wings partly reddish, darker in front, with black speckles, and with two incomplete transverse undulating black lines; orbicular and reniform spots almost elliptical, pupilled with gray and bordered with black, the former about half the size of the latter; claviform obsolete. Hind wings white, testaceous in front beneath. Length of the body 6 lines; of the wings 14 lines.

a. Port Natal. From Dr. Krauss' collection.

Isle Tristram da Cunha.

Group 1.

Palpi conspicui; articulus 3us 2i trientis non brevior. Antennæ longæ. Alæ anticæ angustæ, acuminatæ, margine exteriore

perobliquo. *Mas.*—Antennæ dense pubescentes, non pectinatæ. Sexualia magna. *Fœm.*—Antennæ graciles, simplices.

Palpi prominent; third joint full one-third of the length of the second. Antennæ long. Fore wings narrow, somewhat acuminated, very oblique along the exterior border. *Male.*—Antennæ thickly pubescent, not pectinated. Abdominal appendages large. *Female.*—Antennæ slender, simple.

87. Agrotis costalis.

Mas et fœm. *Ferruginea; abdomen testaceum, apice cervinum; tarsi testaceo fasciati; alæ anticæ costa maculaque orbiculari testaceis, reniformi testaceo marginata.*

Ferruginous. Abdomen testaceous, fawn-coloured at the tip. Tarsi with testaceous bands. Fore wings testaceous along the costa; orbicular spot testaceous; reniform spot with a testaceous border. Hind wings whitish; veins and border testaceous. *Var.* β.—Fore wings with ferruginous marks along the costa. *Var.* γ.—Fore wings pale ferruginous along the costa; orbicular and reniform spots whitish instead of testaceous. Length of the body 7 lines; of the wings 16 lines.

a—d. Isle Tristram da Cunha.

Group 2.

Antennæ *maris et fœm.* simplices. Thorax pilosissimus. Abdomen alas posticas longe superans. Alæ anticæ subtrigonæ, breviusculæ, apice acuminatæ.

Antennæ simple in both sexes. Thorax very hairy. Abdomen extending some distance beyond the hind wings. Fore wings rather short, nearly triangular, acuminated at the tips.

88. Agrotis pilifera.

Obscure ferrugineo-fusca; abdomen pallidum; alæ anticæ innotatæ; posticæ fusco-cinereæ.

Dark ferruginous-brown. Abdomen paler. Fore wings without any marks. Hind wings brownish cinereous. Length of the body 7—9 lines; of the wings 16—20 lines.

a—c. Isle Tristram da Cunha.

Asia.

Group 1.

Like the first European group.

89. Agrotis aristifera.

Pallide cervina; abdomen albido-testaceum; alæ anticæ maculis nigricante et ex parte albido marginatis, claviformi et orbiculari lanceolatis, reniformi subquadrata, linea transversa submarginali angulosa bilanceolata albida nigricante ex parte marginata, lunulis marginalibus nigris; posticæ albæ, fœm. *margine fuscescente.*

Agrotis aristifera, *Guen. Noct.* i. 266, 426.

Central Hindostan.

a. Ceylon. Presented by R. Templeton, Esq.

90. Agrotis interjectionis.

Albido-fuscescens (mas) *aut obscure fusca* (fœm.); *abdomen albidum; alæ anticæ annulis duobus discalibus lituraque posteriore lanceolata obscurioribus; posticæ albæ.*

Agrotis interjectionis, *Guen. Noct.* i. 281, 454.

Java.

91. Agrotis transducta.

Albido-cervina; alæ anticæ lineis nonnullis transversis angulosis indistinctis guttisque costalibus albidis, macula orbiculari obliqua albido marginata, reniformi obscure fusca extus excavata, guttis marginalibus nigris; posticæ albæ, opalinæ, semihyalinæ, margine perangusto fusco.

Whitish fawn-colour. Abdomen paler than the thorax. Fore wings with several indistinct transverse zigzag whitish lines, and with whitish costal dots; claviform spot almost obsolete; orbicular spot oblong, oblique, with a whitish border; reniform spot dark brown, much excavated on the exterior side; a row of black marginal dots. Hind wings white, opaline, semihyaline, with very narrow brown borders. Length of the body 6 lines; of the wings 14 lines.

a. Ceylon. Presented by R. Templeton, Esq.

92. Agrotis aversa.

Mas. *Pallidissime cervina; thorax antice fusco fasciatus; abdomen albido-testaceum; alæ anticæ fusco conspersæ, lituris costalibus indistinctis lunulisque marginalibus fuscis, maculis nigricante submarginatis, claviformi angusta mediocriter longa, orbiculari et reniformi fuscescente pupillatis, illa subrotunda, linea transversa exteriore undulata subobsoleta; posticæ albæ, linea marginali fuscescente.*

Male. Very pale fawn-colour. Thorax with a slender brown band in front. Abdomen whitish testaceous. Fore wings minutely speckled with brown, with indistinct brown marks along the costa, and with brown marginal lunules; spots with incomplete blackish borders; claviform narrow, moderately long; orbicular and reniform with brownish pupils, the former nearly round, rather smaller than the latter, which has the usual form; an exterior almost obsolete transverse undulating line. Hind wings white, with a brownish line along the borders. Length of the body 7 lines; of the wings 16 lines.

a. Punjaub. Presented by Gen. Hearsay.

Group 2.

Like the second European group.

93. Agrotis correcta.

Fœm. *Fusca, subtus albida; abdomen pallidissime fuscum, segmentorum marginibus albidis, alæ anticæ obscure fuscæ, lituris costalibus lunulisque marginalibus nigris et pallidis, maculis concoloribus nigro marginatis, claviformi longiuscula sat angusta, orbiculari rotunda, lineis transversis subobsoletis; posticæ albidæ, venis marginibusque fuscescentibus.*

Female. Brown, whitish beneath. Abdomen very pale brown; hind borders of the segments whitish. Fore wings dark brown, with black and pale costal marks and marginal lunules; spots like the rest of the wing in colour, but with black borders; claviform rather long and narrow; orbicular round, hardly half the size of the reniform, which has the usual shape; transverse lines just perceptible. Hind wings whitish; veins and borders brownish. Length of the body 8 lines; of the wings 18 lines.

a. North India. From Mr. Stevens' collection.

Group 3.

Like the fourth European group.

94. Agrotis basiclavis.

Fœm. *Ferruginea; thorax antice nigro fasciatus; abdomen pallide cervinum; alæ anticæ striga basali nigra, lineis transversis undulatis indistinctis, maculis cinereo marginatis, orbiculari extus attenuata, reniformi extus valde excavata; postica cervino-cinereæ, ciliis albidis.*

Female. Ferruginous. Thorax with a black band in front. Abdomen pale fawn-colour. Fore wings with the transverse lines undulating, slight and indistinct; a black streak extending from the base to the reniform spot, which is much excavated on the outer side, and, like the orbicular, has a cinereous border; orbicular irregular, attenuated towards the reniform. Hind wings cinereous, tinged with fawn-colour; ciliæ whitish. Length of the body 8 lines; of the wings 18 lines.

a. Hindostan.

Group 4.

Like the sixth European group.

95. Agrotis intracta.

Mas. *Obscure fusca; antennæ dense ciliatæ; alæ anticæ sat angustæ, lituris basalibus et costalibus nigris, lineis duabus transversis maculaque claviformi indistinctis, orbiculari et reniformi cinereo nigroque marginatis, illa subrotunda; postica fuscescente-cinereæ.*

Male. Dark brown. Antennæ thickly ciliated. Fore wings rather narrow; with black marks at the base and along the costa, near the tip of which there are two larger black marks; the two transverse lines and the claviform spot indistinct; orbicular and reniform with cinereous and black borders; orbicular nearly round, much smaller than the reniform, which has the usual form. Hind wings brownish cinereous. Length of the body 7 lines; of the wings 16 lines.

a. Nepaul. Presented by Major-Gen. Hardwicke.

96. AGROTIS FOEDA.

Fœm. *Fusco-cinerea; alæ anticæ lineis tribus transversis nigricantibus, orbiculari et macula postica angustis elongatis, reniformi arctata; posticæ cinereæ, basi ciliisque albido-cinereis.*

Agrotis foeda, *Lederer, Verhandl. Zool. Botan. Verein. in Wien.* v. 107, pl. 1, f. 6.

Allied to *A. forcipula.*

Altai. Siberia.

Australia.

Group 1.

Like the first European group.

97. AGROTIS RADIANS.

Cinereo-fusca; abdomen testaceum; alæ anticæ lunulis marginalibus nigris, venis albido marginatis, maculis albo nigroque marginatis, claviformi elongata, orbiculari subfusiformi, reniformi sat magna; posticæ albidæ, fusco marginatæ.

Agrotis radians, *Guen. Noct.* i. 261, 415.

Tasmania.

98. AGROTIS DECLARANS.

Mas. *Pallide cervina; antennæ subpectinatæ; abdomen albido-testaceum; tarsi nigro fasciati; alæ anticæ lineis transversis indistinctis undulatis fuscis, margine exteriore cinereo nebulosa, orbiculari et reniformi ex parte nigro marginatis, hac magna obliqua subelliptica; posticæ albæ, marginibus subcinereis.*

Male. Pale fawn-colour. Antennæ slightly pectinated. Abdomen whitish testaceous. Tarsi with black bands. Fore wings with very indistinct transverse undulating brown lines; a grayish tinge along the exterior border; orbicular and reniform with incomplete black borders, the former large, oblique, subelliptical. Hind wings white; borders slightly grayish. Length of the body 7 lines of the wings 16 lines.

a. ——?

99. Agrotis munda.

Mas et fœm. *Cana, pallidior* (mas) *aut obscurior* (fœm.); *thorax fusco albidoque varius; alæ anticæ macula basali testacea maculis discalibus nigro marginatis, claviformi strigaque discali fuscis, orbiculari fusiformi, reniformi oblonga subquadrata, strigis exterioribus obscure fuscis apice albidis, lunulis marginalibus nigris; posticæ albæ, opalinæ, fusco marginatæ macula apicali subtus magna nigro-fusca.*

Male. Very nearly allied to *A. radians.* Hoary. Thorax with a brown band, or brownish with a whitish band, and a dark brown anterior band. Fore wings brown along the exterior border, with a testaceous mark near the base in junction with a lanceolate brown streak, which is bordered with black; a brown discal streak interrupted by the reniform and orbicular spots which are bordered with black; orbicular spot fusiform; reniform oblong subquadrate, not contracted in the middle; a row of exterior dark brown streaks, and another of black marginal lunules, the former with whitish tips. Hind wings white, opaline, with brown borders; under side with a large dark brown spot on each tip. *Female.*—Darker. Length of the body 6 lines; of the wings 14 lines.

a. Adelaide. From Mr. Stevens' collection.
b. Sidney. From Mr. Lambert's collection.
c—e. Adelaide. Presented by the Entomological Club.
f. Tasmania. Presented by — Walcott, Esq.
g—l. Australia. Presented by J. Hunter, Esq.
m. Australia. Presented by the late Earl of Derby.
n. Tasmania. Presented by R. Butler, Esq.
o, p. Tasmania. Presented by E. Doubleday, Esq.
q, r. Australia. Presented by H. G. Harrington, Esq.
s, t. New South Wales. From Mr. Wood's collection.
v, u. Australia.
w. New Zealand. From Mr. Churton's collection.

The New Zealand specimen is somewhat paler than those from Australia, and its markings are rather different.

100. Agrotis spina.

Ferruginea (mas) *aut nigro-cinerea* (fœm.); *abdomen basi pallidum; alæ anticæ lineis transversis duplicatis indistinctis obscurioribus et pallidioribus, striga discali maculis reniformi et orbiculari interrupta annuloque posteriore nigris; orbiculari subelliptico, reniformi sublunari.*

Agrotis spina, *Guen. Noct.* i. 269, 433.

Australia.

a. Sydney. From Mr. Lambert's collection.
b. Tasmania. From Mr. A. J. Smith's collection.
c. Tasmania. Presented by Morton Allport, Esq.
d. Tasmania. Presented by R. Butler, Esq.

Group 2.

101. AGROTIS CAPULARIS.

Mas et fœm. *Testaceo-cinerea; alæ anticæ squamis pallidioribus, lineis transversis duplicatis undulatis nigro marginatis, orbiculari nulla aut punctiformi, reniformi vaga nigra ochraceo submarginata; posticæ cinereæ, venis obscurioribus.* Mas.—*Antennæ pubescentes.*

Agrotis capularis, *Guen. Noct.* i. 271, 437.

Australia.

102. AGROTIS ATRA.

Fœm. *Nigra; palpi albi, articulo 2o nigro maculato, antennæ pubescentes; oviductus exsertus; alæ anticæ subnitentes, maculis orbiculari et reniformi cinereis, hac lunulata, illa punctiformi; posticæ obscure fuscæ, basi vix pallidiores.*

Agrotis atra, *Guen. Noct.* i. 272, 438.

Var. Hydræcioides, *Guen.* Fœm. *Fusca; thorax antice cinereo marginatus; oviductus exsertus.*

Var. testaceicollis, *Guen.* Fœm. *Nigro-fusca; thorax antice cinereo-rufescens; abdomen apice obtusum, oviductu non exserto; alæ anticæ rufo-fusco marginatæ, strigis submarginalibus nigris, macula reniformi alba.*

Var. cinereicollis, *Guen.* Fœm. *Atra; thorax antice rufescente-cinereus; alæ anticæ innotatæ, reniformi cinerea lunulata excepta; posticæ albæ, venis margineque nigricantibus.*

Var.? restituta, *Guen.* Fœm. *Nigro-cinerea; abdomen valde obtusum, oviductu nullo; alæ anticæ maculis lineisque distinctis; posticæ albæ, venis margineque nigricantibus.*

Australia.

Var. ? Fœm. *Nigra ; palpi albi, nigro fasciati ; abdomen fuscum, alæ anticæ lineis transversis incompletis maculaque disci atris, reniformi albida aut cervina postice subattenuata, orbiculari minima albida subrotunda atro marginata nonnunquam subobsoleta ; posticæ fuscæ.*

Female. Black. Palpi white, with a black band. Abdomen brown. Fore wings with incomplete transverse deep black lines and with a deep black spot by the reniform, which is whitish or fawn-colour, and somewhat attenuated hindward ; orbicular whitish, very small, nearly round, with a deep black border, occasionally almost obsolete. Hind wings brown. Length of the body 7 lines ; of the wings 16 lines.

a. New Holland. Presented by Major-General Hardwicke.
b. Tasmania. Presented by E. Doubleday, Esq.

103. Agrotis tibiata.

Cinerea ; palpi nigro albidoque varii ; tibiæ posticæ validæ pilosæ ; alæ anticæ squamosæ, nigro variæ, margine exteriore obscuro, lineis medianis interruptis denticulatis vix undulatis, orbiculari punctiformi subobsoleta, reniformi parva arctata nigricante fulvescente marginata ; posticæ nigro-cinereæ.

Agrotis tibiata, *Guen. Noct.* i. 273, 439.

Australia.

Group 3.

Like the third European group.

104. Agrotis infusa.

Alæ anticæ fuscæ maculis ordinariis pallidioribus lineola nigra conjunctis, basi strigis duabus angulatis obscurioribus ; posticæ fuscescentes.

Noctua infusa, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 240.

New Holland.

Group 4.

Mas. Antennæ late pectinatæ. Alæ anticæ latiusculæ, extus subquadratæ.

Male. Antennæ deeply pectinated. Fore wings rather broad, subquadrate exteriorly.

105. Agrotis rubrilinea.

Mas. *Cervina; caput rufescens; antennæ albidæ, late pectinatæ; thorax antice ferrugineus, fascia rufescente; abdomen pallidum, apice rufescens aut fuscum; alæ anticæ latiusculæ, extus subquadratæ, strigis nonnullis transversis minutis nigricantibus, linea exteriore transversa incompleta e guttis nigris, macula subapicali fusca, lunulis marginalibus nigris, claviformi obsoleta, orbiculari parva fusca, reniformi magna obscure fusca, guttis duabus contiguis nigris; posticæ cinereæ, venis marginibusque fuscescentibus.*

Var. *Alæ anticæ lituris subobsoletis.*

Male. Fawn-colour. Head reddish. Antennæ whitish. Thorax ferruginous in front, with a reddish band. Abdomen pale, reddish or brown at the tip. Fore wings with some transverse minute blackish streaks, with an exterior incomplete transverse line of black dots, with a brown subapical spot, and with black marginal lunules; claviform spot obsolete; orbicular represented by a small brown spot, and having another small brown spot behind it; reniform large, dark brown, of the usual form, and having two black dots between it and the orbicular; nearly all the above marks are occasionally partly or nearly wholly obsolete. Hind wings cinereous; veins and borders brownish. Length of the body 6—7 lines; of the wings 14—16 lines.

c—c. Australia. Presented by Major-General Hardwicke.

Group 5.

Like the fifth European group.

106. Agrotis recondita.

Mas et fœm. *Ferrugineo-fusca, subtus albida; caput antice album; palpi albi, articulo 3o elongato cylindrico; thorax lineis transversis albidis; abdomen cinereum; alæ anticæ nigro conspersæ, nigricante subnebulosæ, lineis transversis nigris duplicatis undulatis, orbiculari et reniformi nigricantibus, illa parva subrotunda; posticæ cinereæ, marginibus latis fuscescentibus, litura subtus discali fusca.* Mas.—*Antennæ mediocriter pectinatæ.*

Female. Ferruginous-brown, whitish beneath. Head white in front. Palpi white; third joint cylindrical, almost half the length

of the second. Thorax with whitish transverse lines. Abdomen cinereous. Fore wings speckled with black; transverse lines double, undulating, black; a blackish shade here and there on the disk; orbicular and reniform spots blackish, the former small, nearly round. Hind wings cinereous, with broad brownish borders; a brown discal mark on the under side, where the brown borders are well-defined. Length of the body 7 lines; of the wings 16 lines.

a. Tasmania. Presented by R. Butler, Esq.

Country unknown.

Group 1.

Like the first European group.

107. Agrotis porphyricollis.

Mas. *Rufo-cinerea; palpi pedesque albido varii; antennæ longæ, late pectinatæ; thorax antice porphyrio rufus; alæ anticæ robustæ, velutinæ, squamosæ, fusco strigatæ, maculis nigris fusco marginatis, orbiculari punctiformi, reniformi informi, claviformi subobsoleta, lineolis marginalibus nigris; posticæ nigricantes, basi pallidiores.*

Agrotis porphyricollis, *Guen. Noct.* i. 259, 410.

108. Agrotis instructa.

Fœm. *Cervina, subtus alba; thorax fascia antica angusta fusca; abdomen albido-testaceum; alæ anticæ fusco subconspersæ, lineis duabus transversis angulosis incompletis fusco guttatis, lunulis marginalibus fuscis, claviformi subobsoleta, orbiculari alba subelliptica sat magna fusco subnotata, reniformi subrotunda obscure fusca albido marginata; posticæ albæ.*

Female. Fawn-colour, white beneath. Thorax with a narrow brown band in front. Abdomen whitish testaceous. Fore wings very minutely speckled with brown; the two usual transverse lines incomplete, brown, and very zigzag, each angle marked by a dark brown dot; a row of dark brown marginal lunules; claviform almost obsolete; orbicular somewhat elliptical, rather large, white, slightly marked with brown; reniform nearly round, dark brown, with a whitish border. Hind wings pure white. Length of the body 7 lines; of the wings 16 lines.

a ——?

109. Agrotis incongrua.

Mas. *Nigro-fusca; antennæ mediocriter pectinatæ; abdomen cinereum; alæ anticæ lineis transversis undulatis atris, orbiculari et reniformi subobsoletis; posticæ albæ, marginibus latissimi fuscis.*

Male. Blackish brown. Antennæ moderately pectinated. Abdomen cinereous. Fore wings with the usual transverse undulating lines deep black, rather distinct; orbicular and reniform spots almost obsolete. Hind wings white, with very broad brown borders. Length of the body 6 lines; of the wings 14 lines.

a. ——— ?

110. Agrotis insignata.

Fœm. *Ferrugineo-fusca; thorax nigro vittatus; abdomen cinereum; alæ anticæ cinereo conspersæ, lineis transversis pallidioribus et nigricantibus undulatis distinctis, strigis duabus basalibus nigris, macula claviformi testacea, orbiculari et reniformi cinereo marginatis; posticæ fuscescente, cinereæ, ciliis albidis.*

Female. Ferruginous-brown. Thorax with a black stripe. Abdomen cinereous. Fore wings with some cinereous speckles, which are most numerous towards the base of the costa; transverse lines paler and blackish, undulating, distinct; claviform spot testaceous, included in a black streak; orbicular and reniform spots with cinereous borders; orbicular nearly round, of moderate size, interrupting a black streak which extends to the reniform, the latter of the usual shape. Hind wings brownish cinereous, with whitish ciliæ. Length of the body 6½ lines; of the wings 16 lines.

a. ——— ? From Mr. Milne's collection.

Group 2.

Like the third European group.

111. Agrotis messium.

Mas. *Albida; thorax antice fuscus; alæ anticæ strigis, margine exteriore, lineis duabus medianis duplicatis fuscis, maculis discalibus fusco marginatis, orbiculari rotunda fusco pupillata, claviformi parva; posticæ albæ, angulo exteriore subfusco.*

Agrotis messium, *Guen. Noct.* i. 276, 444.

112. Agrotis transversa.

Fœm. *Cervina; abdomen pallidum; alæ anticæ strigis plurimis transversis abbreviatis pallide fuscis, lituris costalibus et lunulis marginalibus obscurioribus, maculis fuscis nigro-fusco marginatis, claviformi longa perangusta, orbiculari rotunda, reniformi informi; posticæ subcinereæ, venis marginibusque subcervinis, ciliis albidis.*

Female. Fawn-colour. Abdomen paler. Fore wings with numerous short transverse pale brown streaks, with darker brown costal marks and marginal lunules; spots brown, bordered with dark brown, claviform long, very narrow; orbicular round, much smaller than the reniform, which is irregular. Hind wings somewhat cinereous; veins and borders somewhat fawn-colour; ciliæ whitish. Length of the body 8 lines; of the wings 18 lines.

a. ——— ?*

113. Agrotis prodenoides.

Mas. *Albido-testacea; antennæ subciliatæ; thorax fascia antica obscura rufo-ferruginea; abdomen pallide cervinum; pedes rufescentes; alæ anticæ nigro conspersæ, fascia marginali obscure rufa nigro marginata, claviformi et orbiculari obsoletis, reniformi e macula lutea guttisque tribus nigris, linea exteriore transversa e guttis nigris, costa nigro biguttata aut triguttata; posticæ albæ, opalinæ, semihyalinæ.*

Male. Whitish testaceous. Antennæ very minutely ciliated. Thorax with a dark reddish brown band in front. Abdomen pale fawn-colour. Legs reddish. Fore wings speckled with black; a dark red black-bordered band along the exterior border; claviform and orbicular spots obsolete; reniform undefined, distinguished by a luteous spot and three black dots; an exterior transverse line of black dots, and two or three black costal dots. Hind wings white, opaline, semihyaline. Length of the body 8 lines; of the wings 18 lines.

a. ——— ? Presented by E. Doubleday, Esq.

114. Agrotis exempta.

Mas. Pallide testacea; caput supra et thorax anticus fusca; alæ anticæ lituris costalibus lineisque transversis undulatis nigris, striga informi discali pallide fusca, striga obliqua inter maculas albida, orbiculari subobsoleta, reniformi fusca albido nigroque marginata, lunulis marginalibus nigris; posticæ albæ, semihyalinæ, marginibus perangustis fuscis.

Male. Pale testaceous, whitish testaceous beneath. Head above and fore part of the thorax brown. Fore wings with black marks along the costa, and with the usual black transverse undulating lines, which are very slight, and with an irregular pale brown discal streak; a whitish oblique streak between the almost obsolete orbicular spot and the reniform one; the latter distinct, consisting of a brown spot surrounded with a whitish hue, which is again bordered with black; a row of black marginal lunules. Hind wings white, semihyaline, with very narrow brown borders. Length of the body 6 lines; of the wings 14 lines.

a. ———?

Genus 3. LYCOPHOTIA.

Statura parva. Corpus sat validum. Proboscis breviuscula. Palpi breves, porrecti, caput paullo superantes; articulus 3us conicus, 2i quadrante non longior. Antennæ corporis dimidio valde longiores. Abdomen alas posticas perpaullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subobliquo. *Mas.*—Antennæ crenulatæ.

Lycophotia, *Hübn. Verz. Schmett.* 215. *Steph. Cat. Brit. Lep.* 73.
Chersotis, p., *Boisd. Ind. Méth.* 103.
Scotophila, *Steph. Ill. Brit. Ent. Haust.* iii. 18.

Size small. Body rather stout. Proboscis rather short. Palpi short, porrect, extending a little beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ very much more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, slightly oblique along the exterior border. *Male.*—Antennæ crenulate.

Europe.

1. Lycophotia porphyrea.

Rubida; thorax albo varius; abdomen testaceum; alæ anticæ ocellis duobus discalibus fasciisque angulosis albis nigro diffuse marginatis; posticæ cinereæ.

——— ———, *Engr. Pap. d'Eur.* 340, a—c.

Noctua porphyrea, *Wien. Verz.* 83, 17. *Hübn. Samml. Eur. Schmett. Noct.* pl. 19, f. 93; pl. 100, f. 473. *Freyer, Alt. Beitr.* pl. 34, 109; *Ent. Zeit. Stett.* ii. 95.

Agrotis porphyrea, *Treit. Schmett. Eur.* v. 2, 73, 3. *Dup. Hist Nat. Lép. Fr.* iii. 440, pl. 100. *Guen. Noct.* i. 295, 481.

Scotophila porphyrea, *Steph. Ill. Brit. Haust.* iii. 19.

Chersotis porphyrea, *Boisd. Ind. Méth.* 103, 769. *Guen. Ann. Soc. Ent. Fr.* vi. 239.

Lycophotia porphyrea. *Hübn. Verz. Schmett.* 215, 2143

Noctua (Polia) porphyrea, *Meig. Syst. Besch.* iii. 133, 93, pl. 104, f. 2.

Noctua picta, *Fabr. Ent. Syst.* iii. 2, 91, 270.

Noctua birivia, *Bork. Eur. Schmett.* iv. 206, 93.

Noctua concinna, *Esp. Schmett.* iv. pl. 152, f. 1.

Noctua Ericæ, *Haw. Lep. Brit.* 187. *Donov. Nat. Hist. Engl. Ins.* pl. 360, f. 1.

a—o. England. From Mr. Stephens' collection.
p—s. England.

2. Lycophotia erythrina.

Porphyrio-fusca; palpi apice cinerei; alæ anticæ nitentes, apice obtusæ, nebulis pallidioribus punctisque albis, maculis quatuor costalibus albis nigro nebulosis, orbiculari et reniformi obsoletis; posticæ nigricantes.

Agrotis erythrina, *Ramb. Ann. Soc. Ent. Fr.* 1849. *Guen. Noct.* i. 296, 483.

Central France.

South America.

3. Lycophotia? Brenna.

Fusco-cervina; alæ anticæ ferrugineo-fuscæ, striga costali basali cervina annulum includente, venis nigris, macula antica obliqua fasciisque duabus exterioribus cinereis; posticæ margine obscuriore.

Phalæna-Noctua Brenna, *Cram. Pap. Exot.* iv. 223, pl. 396, f. H.
Surinam.

4. LYCOPHOTIA SANCTANNA.

Fusca; alæ anticæ nigro alboque variæ, costa alba lituris maculaque majore nigris, lineis duabus, orbiculari et reniformi albis, his parvis, orbiculari ovata, reniformi fusco nebulosa; posticæ albido-cinereæ.

Agrotis sanctanna, *Guen. Noct.* i. 295, 482.

Brazil.

5. LYCOPHOTIA ?? GRANDIMACULA.

Mas et fœm. *Porphyrio-fusca; palpi ascendentes, articulo 2o arcuato ensiformi gracili; tibiæ non spinosæ; alæ anticæ apud medium violaceo-cinereo variæ, lineis duabus medianis albis, orbiculari et reniformi indistinctis; posticæ pallide cinereæ, lunula distincta lineaque subobsoleta discalibus.*

Agrotis grandimacula, *Guen. Noct.* i. 296, 484.

Brazil.

This species, on account of the structure of its palpi, can hardly belong to the genus *Lycophotia.*

Africa.

6. LYCOPHOTIA ? STALACHTIS.

Mas. *Rufa, thorax apice albo maculatus; abdomen flavum; alæ anticæ striga basali, fascia subbasali, guttis, discalibus strigisque apicalibus albis; posticæ fulvescente, basi flavæ.*

Triphassa stalachtis (Noctua genuina, Achatis suavis), *Hübn. Samml. Exot. Schmett.* i. 26, 75, f. 149. 150; *Verz. Schmett.* 215, 2142.

Cape.

Genus 4. HAPALIA.

Corpus robustum. Proboscis mediocriter longa. Palpi breves, subascendentes; articulus 3us conicus, minimus. Antennæ sim-

plices, corporis dimidio longiores. Thorax subsquamosus. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ anticæ sat angustæ, apud costam rectæ, angulo apicali obtuso, margine exteriore antice recto postice rotundato.

Hapalia, *Hübn. Verz. Schmett.* 220. *Steph. Cat. Brit. Lep.* 102.
Actebia, *Steph. Ill. Brit. Ent. Haust.* iii. 20.
Spælotis, p., *Boisd. Ind. Méth.* 107.
Agrotis, p., *Guen. Noct.* i. 296.

Body stout. Proboscis moderately long. Palpi short, slightly ascending; third joint conical, very minute, not more than one-sixth of the length of the second. Antennæ simple in both sexes, more than half the length of the body. Thorax with broad plumes, somewhat like scales. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Fore wings rather narrow, straight in front, obtusely angular at the tips, straight along the fore part of the exterior border, which is rounded hindward.

Europe.

1. Hapalia Præcox.

Prasina; thorax albo varius, vittis duabus guttularibus nigris; abdomen testaceum, basi albidum; alæ anticæ albo conspersæ, ocellis duobus discalibus lineisque tribus transversis undulatis albis nigro marginatis, fascia submarginali fusca; posticæ subtestaceæ, fascia marginali fuscescente.

——— ———, *Röes. Ins. Bel.* i. pl. 51, f. 1—4. *Engr. Pap. d'Eur.* 466, a—c.

Phalæna-Noctua præcox, *Linn. Syst. Nat.* i. 517. *Gmel. ed. Syst. Nat.* i. 5, 2573, 174.

Noctua præcox, *Fabr. Sp. Ins.* ii. 232, 118; *Mant. Ins.* ii. 169, 230; *Ent. Syst.* iii. 2, 97, 289. *Esp. Schmett.* iv. pl. 89, f. 4—7. *Bork. Eur. Schmett.* iv. 430, 172. *Donov. Nat. Hist. Brit. Ins.* vi. pl. 213.

Noctua præceps, *Wien. Verz.* 82, 12. *Bork. Eur. Schmett.* iv. 433, 173. *Hübn. Eur. Schmett. Noct.* pl. 15, f. 70. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 73, f. 2.

Hapalia præcox, *Hübn. Verz. Schmett.* 220, 2204. *Steph. Cat. Brit. Lep.* 102.

Actebia præcox, *Steph. Ill. Brit. Ent. Haust.* iii. 21. *Curt. Brit. Ent.* xii. pl. 539.

Noctua (Polia) præcox, *Meig. Syst. Besch.* iii. 133, 92, pl. 103 f. 7.

Agrotis præcox, *Treit. Schmett.* v. 2, 60, 2. *Guen. Noct.* i. 296, 485.

Spælotis præcox, *Boisd. Ind. Méth.* 107, 803.

a—h. England. From Mr. Stephens' collection.

i—k. England.

l, m. Europe. From M. Becker's collection.

North America.

2. Hapalia indicans.

Mas et fœm. *Pallide viridis; palpi fusci; abdomen testaceum, basi albidum; alæ anticæ lituris costalibus fasciisque albis nigro marginatis, maculis duabus luteis, orbiculari et reniformi indistinctis, ciliis albis nigro notatis; posticæ albidæ, venis margineque fuscescentibus, ciliis albis.*

Male and female. Pale green. Palpi mostly brown. Abdomen pale testaceous, whitish towards the base. Fore wings with white black-bordered marks along the costa, and with white black-bordered undulating bands; two luteous spots, one between the orbicular and reniform spots, which are indistinct, the other behind the first; ciliæ white, with black lunules. Hind wings whitish, brown in front and with a narrow brown border; veins also brown; ciliæ white. Length of the body 5½—6 lines; of the wings 13—14 lines.

a, b. E. Florida. Presented by E. Doubleday, Esq.

South America.

3. Hapalia glaucoptera.

H. præcox *affinis; alæ anticæ macula reniformi maxima valde excavata, claviformi e striga atra, fascia rufo-ferruginea, strigis tribus costalibus nigris, nebula apud maculas nigricante, venis nigro strigatis; posticæ nigricantes, ciliis flavescentibus.*

Agrotis glaucoptera, *Guen. Noct.* i. 297, 486

Brazil.

Country unknown.

4. Hapalia alternans.

Mas et fœm. *Glauco-viridis; caput fuscum; thorax fasciis anticis nigricantibus; abdomen cervinum, fusco fasciatum; alæ anticæ apud costam fuscescentes, lineis transversis undulatis albidis nigro marginatis, maculis duabus (una fusca, altera nigra) exterioribus, lunulis marginalibus nigris, orbiculari et reniformi fusco divisis, hac fusco pupillata, illa subquadrata; posticæ cervinæ, ciliis albidis.*

Male and female. Glaucous-green. Head dark brown. Thorax with blackish bands in front. Abdomen fawn-colour, with brown bands. Fore wings with a brown tinge in front; transverse lines undulating, whitish, with black borders; a submarginal brown spot in the disk, and a black one near the interior angle; marginal lunules black; a brown space between the orbicular spot and the reniform, which are nearly equally large, the former subquadrate, the latter of the usual form, and with a brownish disk. Hind wings fawn-colour, with whitish ciliæ; under side with a brown discal spot. Length of the body 6 lines; of the wings 14 lines.

a, b. ———?

Genus 5. CHERA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, porrecti, breves; articulus 3us minimus. Antennæ simplices, corporis dimidio multo longiores. Abdomen alas posticas superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ longiusculæ, apud costam rectæ, apice rotundatæ, margine exteriore sat obliquo.

Chera, *Hübn. Verz. Schmett.* 211.
Agrotis, p., *Treit.; Guen.*
Polia, p., *Donzel.*

Body stout. Proboscis moderately long. Palpi short, porrect; third joint very small. Antennæ simple, much more than half the length of the body. Abdomen extending rather beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings rather long, straight in front, rounded at the tips, somewhat oblique along the exterior border.

1. Chera renigera.

Fœm. *Alæ anticæ fulvo-cinereæ, fusco pulverulatæ, strigis transversis fuscis pallidis, maculis duabus flavo-cinereis nigro cinctis; posticæ fulvo-cinereæ, ad marginem fuscæ, fimbria flavescente.*

Polia dumosa, *Donzel. Ann. Soc. Ent. Fr.* vi. 475, 5, pl. 18, f. 5. *Boisd. Ind. Méth.* 127, 1026. *Gey. Samml. Eur. Schmett.* 880. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 446, pl. 39. *Guen. Ann. Soc. Ent. Fr.* vi. 244.
Agrotis renigera, *Guen. Noct.* i. 297, 487.
Noctua renigera, *Hübn. Samml. Eur. Schmett. Noct.* pl. 82, f. 384.
Agrotis renigera, *Treit. Schmett. Eur.* i. 197; *Suppl.* 32. *Dup. Hist. Nat. Lép. Fr.* vi. 41, pl. 74, f. 6. *Herr.-Schæff. Schmett. Eur.* ii. pl. 80, f. 413, 414.
Chera renigera, *Hübn. Verz. Schmett.* 211, 2113.
Noctua (Agrotis) renigera, *Meig. Syst. Besch.* iii. 94, 23, pl. 95, f. 9.

France. Hungary.

Genus 6. SPÆLOTIS.

Corpus robustum. Proboscis mediocriter longa. Palpi breves, ascendentes; articulus 3us linearis, 2i dimidio brevior. Antennæ graciles, corporis dimidio valde longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis; anticæ spinosæ. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore subconvexo mediocriter obliquo. *Mas.*—Antennæ crenulatæ.

Spælotis, *Boisd. Ind. Méth.*
Agrotis, p., *Ochs.; Treit.; Guen. Noct.* i. 299.
Rhyacia, p., Epipsilia, p., Mimetes, p.? Chera, p., Ogygia, p., *Hübn. Verz. Schmett.* 209, 210, 211, 225.
Caradrina, p., *Herr.-Schæff.*

Body stout. Proboscis moderately long. Palpi short, ascending; third joint linear, less than half the length of the second. Antennæ slender, very much more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout;

hind tibiæ with four long spurs; fore tibiæ spinose. Wings moderately broad. Fore wings straight in front, slightly rounded at the tips, slightly convex and moderately oblique along the exterior border. *Male.*—Antennæ crenulated.

Europe.

A. Alæ posticæ ciliis albis.
  A. Alæ albidæ. - - - - - decora, *Wien. Verz.*
  B. Alæ obscuræ.
    A. Alæ posticæ cinereæ. - - - birivia, *Wien. Verz.*
    B. Alæ posticæ fuscescentes. - - - detorta, *Everam.*
B. Alæ posticæ ciliis albidis, testaceis aut cinereis.
  A. Alæ anticæ longiores, margine exteriore magis obliquo.
    A. Alæ anticæ luteo variæ. - - lucipeta, *Wien. Verz.*
    B. Alæ anticæ luteo non variæ.
      i. Alæ posticæ *maris* albæ. - - Valesiaca, *Boisd.*
      ii. Alæ posticæ *maris* albidæ.
        * Alæ anticæ rufescente-cinereæ. - gilva, *Donzel.*
        ** Alæ anticæ flavescente tinctæ. - - fugax, *Ochs.*
        *** Alæ anticæ flavescente non tinctæ.
          † Alæ anticæ lineis nigro marginatis. grisescens, *Fabr.*
          †† Alæ anticæ lineis nigro non marginatis. lucernea, *Linn.*
      iii. Alæ posticæ testaceæ. - - myctimera, *Boisd.*
      iiii. Alæ posticæ *maris* cinereæ.
        * Alæ anticæ fuscæ. - - dumetorum, *Geyer.*
        ** Alæ anticæ cinereæ.
          † Orbicularis minuta. - Helvetina, *Anderr.*, *Boisd.*
          †† Orbicularis non minuta. - squalida, *Boisd.*
  B. Alæ anticæ breviores, margine exteriore minus obliquo.
    A. Alæ posticæ margine nigricante, bene determinato. confusa, *Frey.*
    B. Alæ posticæ margine obscuriore non bene determinato.
      iiiii. Alæ posticæ fuscæ. - - - latitans, *Guen.*
      a. Alæ anticæ ferruginosæ.
        i. Thorax pilis nonnullis albidis. - Senna, *Geyer.*
        ii. Thorax pilis nullis albidis. - - ravida, *Wien. Verz.*
      b. Alæ anticæ cervinæ aut cinerascentes.
        i. Statura major.

* Orbicularis elliptica. - - pyrophila, *Wien. Verz.*
** Orbicularis rotunda. - - - sibirica, *Boisd.*
ii. Statura minor.
* Alæ anticæ cinereæ, pallidiores. - latens, *Hübn.*
** Alæ anticæ cervinæ, obscuriores. - fimbriola, *Hübn.*

1. Spælotis fugax.

Cinerea; abdomen canescens; tarsi albo fasciati; alæ anticæ ex parte flavescente tinctæ, fasciis angulosis fuscescentibus, maculis subobsoletis, guttis marginalibus nigricantibus; posticæ albidæ, venis guttisque marginalibus fuscescentibus.

Noctua fugax, *Dup. Hist. Nat. Lép. Fr.* iii. 27, pl. 73. *Frey. Beit. Ges. Eur. Schmett.* pl. 45.
Spælotis fugax, *Boisd. Ind. Méth.* 107, 802. *Herr.-Schæff. Schmett. Eur.* ii. pl. 34, f. 170.
Agrotis fugax, *Ochs. Nachtr.* 67, 8. *Treit. Schmett. Eur.* i. 195. *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 299, 491.
Noctua lucernea, *Hübn. Samml. Eur. Schmett. Noct.* f. 44. *Bork. Eur. Schmett.* 99.
Chera fugax, *Hübn. Verz. Schmett.* 211, 2112.

a. Europe. From M. Becker's collection.

2. Spælotis Senna.

Fusco-cinerea; abdomen testaceum; alæ anticæ ocellis duobus discalibus, fasciis tribus undulatis maculisque discalibus pallidioribus nigro ex parte marginatis; posticæ cinereæ, basi pallidiores.

Noctua Senna, *Geyer, Samml. Eur. Schmett.* i. 771, 772. *Frey. Neu. Beit. Schmett.* pl. 66, f. 1.
Agrotis Senna, *Treit. Schmett. Eur. Suppl.* x. 18. *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 300, 492.
Spælotis Senna, *Boisd. Icon. Lép. d'Eur.* pl. 77; *Ind. Méth.* 107, 801. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 183, pl. 18, f. 2.
Agrotis Valdensis, *Boisd. Ind. Méth. Ed.* 1.

a, b. Europe. From M. Becker's collection.

3. Spælotis detorta.

Alæ anticæ cinereæ, fusco obscuratæ, strigis ordinarii[s] denticulati nigris maculisque ordinariis distinctis, macula reniformi margine interno recto; alæ posticæ fuscescentes, albo ciliatæ.

Agrotis detorta, *Eversmann, Bull. Soc. Imp. Nat. Mosc.* 1851, xxiv N. 2, 628, 16.

Kiachta, Eastern Siberia..

4. Spælotis ravida.

Cinereo-fusca; abdomen canum; alæ anticæ lineis transversis undulatis annulisque duobus nigricantibus canescente marginatis, posticæ albidæ, margine cinereo.

——— ———, *Engr. Pap. d'Eur.* 342, d, e; 421.
Noctua ravida, *Wien. Verz.* 80, 7. *Hübn. Samml. Eur. Schmett Noct.* f. 126, 600. *God. Hist. Nat. Lép. Fr.* ii. 234, pl. 66 *Frey. Neu. Beit. Schmett.* iii. pl. 208.
Noctua bigramma, *Esp. Schmett.* iv. pl. 150, f. 2.
Noctua obelisca, *View. F. V.* ii. 60.
Noctua austera, *Esp. Schmett.* iv. pl. 142, f. 5.
Noctua obducta, *Esp. Schmett.* iv. pl. 142, f. 4.
Noctua obscura, *Bork. Eur. Schmett.* 217. *Brahm.* ii. 191.
Noctua crassa, *Haw. Lep. Brit.* 220, 171.
Agrotis ravida, *Treit. Schmett. Eur.* i. 207. *Guen. Noct.* i. 300, 493
Spælotis ravida, *Boisd. Ind. Méth.* 106, 799. *Steph. Cat. Brit Lep.* 69.
Ogygia ravida, *Hübn. Verz. Schmett.* 225, 2255.
Graphiphora crassa, *Steph. Ill. Brit. Ent. Haust.* ii. 130. *Westw & H. Brit. Moths*, i. 127, pl. 25, f. 5.

a—f. England. From Mr. Stephens' collection.
g. England.
h—l. Europe. From M. Becker's collection.
m—p. Trenton Falls, New York. Presented by E. Doubleday, Es
q. New York. From Mr. Milne's collection.
r. ——— ?

5. Spælotis squalida.

Cinereo-fusca, obscurius signata, linea undulata basim versus obscurius adumbrata, maculis orbiculari et reniformi pallidis marginatis.

Spælotis squalida, *Boisd. Ind. Méth.* 107, 800.

Agrotis squalida, *Guen. Noct.* i. 300, 494.
Agrotis agricola, *Eversm. Faun. Volg-Ural.* 195.
Agrotis Lycarum, *Herr.-Schæff. Schmett. Eur.* ii. 333, 456; ii. pl. 25, f. 122—124.

Dahuria. Sarepta. Ural District.

6. Spælotis sibirica.

A. Pyrophila *affinis; alæ anticæ cinereo-fuscæ, lineis tribus transversis duplicatis undulatis nigris, maculis orbiculari et reniformi magnis nigro marginatis, illa rotunda.*

Spælotis sibirica, *Boisd. Icon. Lép. d'Eur.* pl. 80, f. 6; *Ind. Méth.* 108, 813.
Agrotis sibirica, *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 301, 495.

Switzerland? Ural District. Siberia.

7. Spælotis pyrophila.

Cinerea; thorax antice nigro fasciatus; alæ anticæ nigricante conspersæ, lituris costalibus, lineis transversis interruptis angulosis aut undulatis nigricantibus, punctis marginalibus nigris, orbiculari et reniformi nigro marginatis, hac nigro signata, illa elliptica; posticæ ciliis albidis.

——— ———, *Engr. Pap. d'Eur.* 342, a—c.
Noctua pyrophila, *Wien. Verz.* 71, 4. *Fabr. Mant. Ins.* ii. 170, 233; *Ent. Syst.* iii. 2, 98, 292. *Bork. Eur. Schmett.* iv. 207, 94. *Hübn. Samml. Eur. Schmett. Noct.* 9, f. 43. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 74, f. 2.
Phalæna-Noctua pyrophila, *Gmel. ed. Syst. Nat.* i. 5, 2575, 1171.
Noctua simulans, *Fabr. Mant. Ins.* ii. 177, 269. *Hüfn. Berl. Mag.* iii. 396. *Bork. Eur. Schmett.* iv. 211, 96.
Phalæna-Noctua simulans, *Gmel. ed. Syst. Nat.* i. 5, 2562, 1125.
Noctua tristis, *Fabr. Sp. Ins.* ii. 238, 142; *Mant. Ins.* ii. 180, 287; *Ent. Syst.* iii. 218, 357.
Phalæna-Noctua tristis, *Gmel. ed. Syst. Nat.* i. 5, 2573, 1165.
Noctua radicea, *Esp. Schmett.* iv. pl. 143, f. 1, 2.
Noctua (Agrotis) pyrophila, *Meig. Syst. Besch.* iii. 96, 26, pl. 94, f. 7.
Agrotis pyrophila, *Treit. Schmett.* v. 1, 202, 38. *Guen. Noct.* i. 301, 496. *Herr.-Schæff. Schmett. Eur.* ii. 334, 457.
Spælotis pyrophila, *Boisd. Ind. Méth.* 108, 814. *Steph. Cat. Brit. Lep.* 69.

Epipsilia pyrophila, *Hübn. Verz. Schmett.* 210, 2097.
Graphiphora pyrophila, *Steph. Ill. Brit. Ent. Haust.* ii. 130. *Westw. & H. Brit. Moths*, i. 126, pl. 25, f. 4.

a. Scotland. Presented by A. Hepburn, Esq.
b—*l*. England. From Mr. Stephens' collection.
m—*s*. Europe. From M. Becker's collection.
t. Lapland.
v, *w*. Europe. From M. Becker's collection.
x. Nova Scotia. From Lieut. Redman's collection.

8. Spælotis lucipeta.

Cinerea; abdomen testaceum; alæ anticæ fascia media obscuriore, macularum marginibus fasciisque nonnullis transversis undulatis aut angulosis pallide luteis, orbiculari rotunda; posticæ fusco-cinereæ, ciliis testaceis.

——— ———, *Engr. Pap. d'Eur.* 341, a.
Phalæna-Noctua lucipeta, *Gmel. ed. Syst. Nat.* i. 5, 2575, 1170.
Noctua lucipeta, *Wien. Verz.* 71, 2. *Fabr. Mant. Ins.* ii. 169, 232; *Ent. Syst.* iii. 2, 98, 291. *Esp. Schmett.* iv. pl. 120, f. 3. *Bork. Eur. Schmett.* iv. 204, 92. *Hübn. Samml. Eur. Schmett. Noct.* pl. 9, f. 41. *God. Hist. Nat. Lép. Fr.* ii. 266, pl. 70. f. 5.
Agrotis lucipeta, *Treit. Schmett. Eur.* v. 200, 37. *Guen. Noct.* i. 301, 497.
Spælotis lucipeta, *Boisd. Icon. Lép. d'Eur.* pl. 80, f. 4; *Ind. Méth.* 107, 811.
Rhyacia lucipeta, *Hübn. Verz. Schmett.* 210, 2094.
Noctua (Agrotis) lucipeta, *Meig. Syst. Besch.* iii. 95, 25, pl. 95, f. 1.

a, *b*. Europe. From M. Becker's collection.

9. Spælotis Helvetina.

Alæ anticæ sericeo-cinereæ strigis duabus maculisque ordinariis pallidis, orbiculari minuta; posticæ cinereo-fuscæ; omnium fimbria luteo-cinerascente.

Noctua Helvetina, *Anderreg, Boisd. Ann. Soc. Ent. Fr.* ii. 376, pl. 14, f. 3.
Spælotis Helvetina, *Boisd. Icon. Lép. d'Eur.* pl. 82, f. 4; *Ind. Méth.* 107, 806. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 207, pl. 19. *Herr.-Schæff. Schmett. Eur.* ii. 334, 458, pl. 3, f. 12—14.

Agrotis Helvetina, *Guen. Noct.* i. 302, 499.
Noctua Livia, *Frey. Beitr.* iii. pl. 201.

Alps of the Valais.

a. Europe. From M. Becker's collection.

10. Spælotis birivia.

Cinerea; alæ anticæ lineis transversis undulatis indistinctis nigricantibus; posticæ basi pallidiores, ciliis albis.

Noctua birivia, *Wien. Verz.* 71, 3. *Hübn. Samml. Eur. Schmett. Noct.* pl. 9, f. 42.
Spælotis birivia, *Boisd. Ind. Méth.* 107, 805. *Herr.-Schæff. Schmett. Eur.* 9, 10.
Agrotis birivia, *Treit. Schmett. Eur.* v. 1, 191, 32. *Dup. Hist. Nat. Lép. Fr.* ii. 267, pl. 70, f. 7. *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 303, 501.
Rhyacia birivia, *Hübn. Verz. Schmett.* 210, 2095.
Noctua (Agrotis) birivia, *Meig. Syst. Besch.* iii. 94, 22, pl. 95, f. 2.

Var. *Alæ anticæ cinereæ, cærulescentes, maculis lineisque albicantibus; posticæ albicantes, ad marginem pallide cinereæ, puncto discali concolore.*

Agrotis Honnoratina, *Donzel, Ann. Soc. Ent. Fr.* vi. 474, 3, pl. 18, f. 3, 4.
Agrotis birivia, *var.* Honnoratina, *Guén. Noct.* i. 303.
Agrotis birivia, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 463, pl. 40, f. 7.
Noctua birivia, *Hübn. Samml. Eur. Schmett.* 631.

a, b. Europe. From M. Becker's collection.

11. Spælotis dumetorum.

Obscure fusca; abdomen fusco-cinereum; alæ anticæ fasciis indistinctis undulatis nigricantibus, maculis distinctis, orbiculari subrotunda; posticæ fuscæ, basi pallidiores.

Noctua dumetorum, *Gey. Samml. Eur. Schmett.* f. 839.
Agrotis dumetorum, *Boisd. Icon. Lép. d'Eur.* pl. 78, f. 5; *Ind. Méth.* 798. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 303, 502.

Digne.

12. Spælotis grisescens.

Pallide cinerea; alæ anticæ glauco canescentes, lineis transversis undulatis albidis nigro marginatis, macula inter orbicularem et reniformem obscure cinerea, orbiculari et reniformi albidis ex parte nigro marginatis, illa subrotunda; posticæ albidæ, linea discali margineque cinereis.

Noctua grisescens, *Fabr. Ent. Syst.* iii. 2, 332.
Agrotis grisescens, *Treit. Schmett. Eur.* i. 193. *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 303, 503.
Spælotis grisescens, *Boisd. Ind. Méth.* 108, 819. *Herr.-Schæff. Schmett. Eur.* ii. 332, 453; ii. pl. 81, f. 418.

Breslau.

13. Spælotis gilva.

Fœm. *Alæ anticæ cinereæ rufescentes, maculis duabus lineisque nigricantibus; posticæ albicantes, ad marginem leviter fuscæ; antennæ filiformes.*

Noctua nebulosa? *Hübn. Samml. Eur. Schmett. Noct.* f. 877. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 461, pl. 40.
Agrotis gilva, *Donzel, Ann. Soc. Ent. Fr.* vi. 473, 2, pl. 18, f. 2. *Boisd. Ind. Méth.* 108, 818. *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 304, 504.
Caradrina gilva, *Herr.-Schæff. Eur. Schmett.* ii. 207, 83; ii. *Noct.* pl. 80, f. 410, 411.
Mimetes nubilosa? *Hübn. Verz. Schmett.* 210, 2102.

Digne.

14. Spælotis decora.

Cana; abdomen albidum; alæ anticæ lineis duabus transversis flexuosis angulosis nigricantibus maculisque tribus intermediis discalibus testaceo-albidis; posticæ albidæ, marginibus cinereis.

Noctua decora, *Wien. Verz.* Q, 4, 5. *Bork. Eur. Schmett.* 308. *Hübn. Samml. Eur. Schmett. Noct.* f. 45.
Agrotis decora, *Treit. Schmett. Eur.* i. 188. *Dup. Hist. Nat. Lép. Fr.* iv. 84, pl. 78. *Herr.-Schæff. Schmett. Eur.* ii. 334, 459. *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 304, 505.
Spælotis decora, *Boisd. Icon. Lép. d'Eur.* pl. 81, f. 2; *Ind. Méth.* 108, 817.

a, *b*. Europe. From M. Becker's collection.

15. Spælotis lucernea.

Alæ anticæ obscure cinereæ, saturatiores extus strigis duabus undulatis pallidis, maculis ovdinariis subnullis, reniformi in umbram evanescente; posticæ cinereo-plumbeæ, antice pallidæ, subtus dimidiatum albidæ.

Phalæna-Noctua lucernea, *Linn. Syst. Nat.* 102; *Faun. Suec.* 1152. *Clerck*, pl. f. 7.
Noctua lucernea, *Wien. Verz. Ind.* 202.
Graphiphora renigera, *Steph. Ill. Brit. Ent. Haust.* ii. 129. *Westw. and H. Brit. Moths*, i. 126, pl. 25, f. 2, 3.
Noctua Cataleuca, *Boisd. Ann. Soc. Ent. Fr.* ii. 377, pl. 14, f. 2.
Spælotis Cataleuca, *Boisd. Ind. Méth.* 107, 804. *Steph. Cat. Brit. Lep.* 69.
Agrotis lucernea, *Guen. Noct.* i. 305, 506.

a—e. England. From Mr. Stephens' collection.
f, g. England.

16. Spælotis nyctimera.

Pallidissime cervina; thorax antice obscurior; pectus album; abdomen testaceum; alæ anticæ cinereo conspersæ et undulato fasciatæ; posticæ testaceæ, margine lato cinerascente.

Spælotis nyctimera, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 604, pl. 50. *Bruand, Ann. Soc. Ent. Fr. 2me Sér.* ii. 192, pl. 6, No. 1, C, a, b, larvæ.
Noctua nyctimera, *Geyer, Samml. Eur. Schmett.* 852.
Noctua simulatrix, *Geyer, Samml. Eur. Schmett.* pl. 153, f. 712.
Agrotis nyctimera, *Boisd. Icon. Lép. d'Eur.* pl. 78, f. 1, 2. *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 305, 507.
Spælotis nyctimera, *Boisd. Ind. Méth.* 167, 812. *Herr.-Schæff. Schmett. Eur.* ii. pl. 34, f. 171.

a. Europe. From M. Becker's collection.

17. Spælotis Valesiaca.

Flavescente-testacea; palporum articulus 2us fusco maculatus; antennæ subfiliformes; tarsi annulis nigro-fuscis; alæ anticæ fusco conspersæ, lunulis marginalibus magnis subcontiguis liturisque aliis nigro-fuscis, orbiculari et reniformi concoloribus fusco subdivisis, claviformi subobsoleto; posticæ albæ, venis margineque pallidę testaceis.

Spælotis Valesiaca, *Boisd. Icon. Lép. d'Eur.* pl. 78, f. 3; *Ind. Méth.* 107, 807.

Noctua Valesiaca, *Frey. Neu. Beit. Schmett.* iv. pl. 351, f. 3, 4. *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 306, 508. *Herr.-Schæff. Schmett. Eur.* ii. 334, 460, pl. 17, f. 80.
Agrotis Valesiaca, *Eversm. Faun. Volg-Ural.* 611.

Valais, Switzerland. South Russia.

Var.? *Cana; alæ anticæ lituris costalibus, striga discali lineisque transversis undulatis nigricantibus; posticæ cinereæ.*

Agrotis Vallesiaca, *Stainton, Entomologist's Annual.*
Agrotis Ashworthii, *H. Doubleday.*
Wales.

18. Spælotis confusa.

Pallide testaceo cinerascens; alæ anticæ subcervinæ, nigricante conspersæ cinereo subnebulosæ, macula discali, guttis costalibus strigulisque transversis marginalibus nigricantibus; posticæ margine lato nigricante.

Noctua confusa, *Frey. Neu. Beit. Schmett.* iv. pl. 303, f. 1.
Spælotis confusa, *Boisd. Ind. Méth.* 107, 809. *Herr.-Schæff. Schmett. Eur.* ii. pl. 9, f. 44, 45.
Agrotis confusa, *Eversm. Faun. Volg-Ural.* 206. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 306, 509.

a, *b*. Europe. From M. Becker's collection.

19. Spælotis latens.

Pallide murina; abdomen murino-albidum; alæ anticæ atomis, lineis transversis denticulatis punctisque marginalibus nigricantibus; posticæ murino-albidæ, marginibus cinereis.

Noctua latens, *Hübn. Samml. Eur. Schmett. Noct.* f. 419. *Dup. Hist. Nat. Lép. Fr.* iii. 29, pl. 73. *Frey. Neu. Beit. Schmett.* iii. pl. 219.
Spælotis latens, *Boisd. Icon. Lép. d'Eur.* pl. 80, f. 2; *Ind. Méth.* 108, 816.
Agrotis latens, *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 307, 510. *Herr.-Schæff. Schmett. Eur.* ii. 332, 454.
Epipsilia latens, *Hübn. Verz. Schmett.* 210, 2096.
Noctua candelisequa, *Hübn. Eur. Schmett. Noct.* f. 493.
Noctua ignicola, *Hübn. Eur. Schmett. Noct.* f. 546. *God. Hist. Nat. Lép. Fr.* iii. 14, pl. 72, f. 3.

—c. Europe. From M. Becker's collection.

Var. β. *Alæ anticæ lineis transversis obscurioribus, bene determinatis.*

Cape.

20. SPÆLOTIS LATITANS.

Albido-flavescens; antennæ subcrenulatæ, anticæ lineis transversis nigricantibus sæpe confusis, medianis duabus duplicatis undulatis, orbiculari et reniformi concoloribus litura nigra divisis, claviformi obsoleta; posticæ pallide fuscæ, ciliis albidis.

Noctua latens, *Boisd. Icon. Lép. d'Eur.* pl. 80, f. 1. *Gey. Samml. Eur. Schmett.* 806, 807 ??
Noctua murina, *Frey. Neu. Beit. Schmett.* iv. pl. 364, f. 1 ?
Agrotis latitans, *Guen. Noct.* i. 308, 511.

Valais, Switzerland.

21. SPÆLOTIS FIMBRIOLA.

Murina; alæ apud margines obscuriores, anticæ ocellis duobus discalibus (exteriore magno) fasciisque tribus angustis duplicatis undulatis guttisque basalibus et costalibus nigris.

——— ———, *Engr. Pap. d'Eur.* 450, a.
Noctua fimbriola, *Esp. Schmett.* pl. 193, f, 3. *Hübn. Samml. Eur. Schmett. Noct.* f. 603. *Dup. Hist. Nat. Lép. Fr.* iii. 33, pl. 74. *Frey. Neu. Beit. Schmett.* iii. pl. 207.
Spælotis fimbriola, *Boisd. Icon. Lép. d'Eur.* pl. 81, f. 4; *Ind. Méth.* 107, 810.
Agrotis fimbriola, *Treit. Schmett. Eur.* i. 190. *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 308, 512.]
Epipsilia fimbriola, *Hübn. Verz. Schmett.* 210, 2100.

a, b. Europe. From M. Becker's collection.

South America.

22. SPÆLOTIS SUBSIGNATA.

Mas. *Cinerea; antennæ ciliatæ; thorax antice nigro fasciatus; abdomen canum; alæ anticæ fusco subconspersæ, lituris costalibus lunulisque marginalibus nigris, lineis nonnullis transversis undulatis nigricantibus, maculis nigro marginatis, claviformi subobsoleta, orbiculari alba subrotunda, reniformi magna lata; posticæ albidæ, venis margineque fuscis.*

Var. β. *Thorax non fasciatus; alæ anticæ lineis confusis, maculis indistinctis, orbiculari fusco conspersa.*

Male. Cinereous. Antennæ ciliated. Thorax with a black band in front. Abdomen hoary. Fore wings speckled with brown, with black marks along the costa, with black marginal lunules, and with several blackish transverse undulating lines; spots with black borders; claviform almost obsolete; orbicular white, almost round, rather less than half the size of the reniform, which is large and broad, and of the usual shape. Hind wings whitish, with brown veins and borders. Length of the body 7 lines; of the wings 16 lines.

a. Santa Fé de Bogotà. From Mr. Isaacson's collection.

Var. β. Thorax without a black band. Fore wings with the lines more confused; spots more indistinct; orbicular speckled with brown.

b. Venezuela. From Mr. Dyson's collection.

Africa.

23. Spælotis Photophila.

A. Lucipetæ *affinis; alæ anticæ obscuriores, magis cinereæ, minus flavescentes, lineis paucioribus pallidioribus, maculis indistinctis; posticæ magis albæ.*

Agrotis Photophila, *Guen. Noct.* i. 302, 498.

Algeria.

Asia.

24. Spælotis Indiana.

Mas. *Fusco-cinerea; antennæ pubescentes; alæ anticæ oblongæ, subdenticulatæ, nitentes, lineis duabus medianis et macularum marginibus nigricantibus, fasciis undulatis, orbiculari rotundata, reniformi incompleta; posticæ paullo pallidiores.*

Agrotis Indiana, *Guen. Noct.* i. 302, 500.

Hindostan.

Genus 7. CHERSOTIS.

Corpus robustum. Proboscis longiuscula. Palpi validi, pilosi, porrecti; articulus 3us minimus. Antennæ corporis dimidio multo longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ lituris bene determinatis, apud costam rectæ, apice subrotundatæ, margine exteriore vix aut paullo obliquo. *Mas.*—Antennæ subcrenulatæ.

Chersotis, p., *Boisd. Ind. Méth.* 103.
Agrotis, p., *Guen. Noct.* i. 309.
Metaxya, p., *Hübn. Verz. Schmett.* 223.
Hadena, p., *Boisd. Ind. Méth.* 119.

Body stout. Proboscis rather long. Palpi stout, pilose, porrect; third joint very minute, not one fourth of the length of the second. Antennæ much more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings with very distinct markings, straight in front, somewhat rounded at the tips, slightly or hardly oblique along the exterior border. *Male.*—Antennæ minutely crenulate.

Europe.

A. Alæ anticæ venis pallidioribus.
  A. Alæ posticæ *maris* albæ. - - - grammiptera, *Dup.*
  B. Alæ posticæ *maris* cinereæ. - - - Alpestris, *Boisd.*
  C. Alæ posticæ fuscæ. - - - - ocellina, *Wien. Verz.*
  D. Alæ posticæ nigricantes. - - - - larixia, *Guen.*
B. Alæ anticæ venis non pallidioribus.
  A. Alæ anticæ fasciis distinctis.
    A. Alæ anticæ apices versus nigricantes. multangula, *Hübn.*
    B. Alæ anticæ apices versus non nigricantes. deplana, *Herr.-Schæff.*
  B. Alæ anticæ fasciis interruptis. - rectangula, *Wien. Verz.*
  C. Alæ anticæ fasciis obsoletis. - - Anderregii, *Boisd.*

1. Chersotis alpestris.

Cinereo-fusca; abdomen pallide fuscescens; alæ anticæ vittulis anticis strigisque exterioribus lanceolatis nigricantibus, lineis duabus transversis undulatis, strigis lanceolatis, ocellis duobus discalibus (exteriore elongato flexo) venisque sordide albidis; posticæ fuscæ, ciliis pallidioribus.

Chersotis alpestris, *Boisd. Icon. Lép. d'Eur.* pl. 76, f. 4, 5; *Ind. Méth.* 103, 768. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 454, pl. 40. *Herr.-Schæff. Schmett. Eur.* ii. pl. 1, f. 5, 6.
Agrotis alpestris, *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 309, 513.

a, *b*. Europe. From M. Becker's collection.

2. Chersotis ocellina.

Obscure fusca; alæ anticæ venis, lineis duabus transversis et macularum marginibus cinereis, strigis exterioribus nigricantibus, maculis reniformi et orbiculari cinereo pupillatis, hac rotunda, illa angusta; posticæ cinereo ciliatæ.

——— ———, *Engr. Pap. d'Eur.* 420, a, b.
Noctua ocellina, *Wien. Verz.* 313, 16, 17. *Hübn. Samml. Eur. Schmett. Noct.* pl. 27, f. 129; pl. 93, f. 439. *God. Hist. Nat. Lép. Fr.* v. 221, pl. 63, f. 1?
Noctua Phyteumæ, *Esp. Schmett.* iv. pl. 192, f. 3, 4.
Metaxya ocellina, *Hübn. Verz. Schmett.* 223, 2239.
Agrotis ocellina, *Treit. Schmett. Eur.* v. 1, 129, 3. *Guén. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 309, 514.
Chersotis ocellina, *Boisd. Icon. Lép. d'Eur.* pl. 76, f. 3; *Ind. Méth.* 103, 767.
Noctua (Agrotis) ocellina, *Meig. Syst. Besch.* iii. 83, 2, pl. 95, f. 6.

a. Europe. From M. Becker's collection.

3. Chersotis grammiptera.

Subpurpurascente-fusca; thorax lineis transversis biarcuatis nigris albidisque; abdomen albidum, apice subtestaceum; alæ anticæ guttis costalibus, lineis transversis, ocellis duobus anguloque acuto discalibus albidis nigro marginatis, lineolis lanceolatis exterioribus nigris, linea transversa submarginate albida; posticæ maris *albidæ*, fœm. *cinereæ.*

Hadena grammiptera, *Boisd. Ind. Méth.* 119, 933.
Agrotis grammiptera, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 450, pl. 40, f. 1. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 309, 515. *Herr.-Schæff. Schmett. Eur.* ii. pl. 1, f. 3, 4.
Noctua cancellata, *Frey. Neu. Beit. Schmett.* iv. pl. 303, f. 2.
Hadena elegans, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837, 1; *Faun. Volg-Ural.* 187.

a. Europe. From M. Becker's collection.

4. Chersotis larixia.

A. grammiptera *affinis, at major magisque oblonga; alæ anticæ flavescente-cinereæ, lineis transversis minus determinatis minusque nigro marginatis, maculis orbiculari et reniformi plus indistinctis nigro divisis cinereoque pupillatis, reniformi breviore minus arctata, strigis lanceolatis submarginalibus minus conspicuis, linea marginali ochracea; posticæ nigricantes, ciliis albis.*

Agrotis larixia, *Guen. Noct.* i. 310, 516.

French Alps.

5. Chersotis multangula.

Fusca; palpi basi antennæque nigra; abdomen cinereum; pedes nigro varii; tarsi nigri, cinereo fasciati; alæ anticæ maculis subquadratis discalibus lineisque transversis undulatis nigris, apices versus nigricantes linea transversa angulosa fuscescente; posticæ pallide cinereæ marginibus latis obscurioribus.

Noctua multangula, *Hübn. Samml. Eur. Schmett.* 116. *God. Hist. Nat. Lép. Fr.* v. 207, pl. 63, f. 6. *Frey. Neu. Beit. Schmett.* iv. pl. 339.

Agrotis multangula, *Treit. Schmett. Eur.* v. 1, 127, 2. *Guen. Ann. Soc. Ent. Fr.* vi. 240; *Noct.* i. 311, 517.

Chersotis multangula, *Boisd. Icon Lép. d'Eur.* pl. 76, f. 2; *Ind. Méth.* 103, 766.

Epipsilia multangula, *Hübn. Verz. Schmett.* 210, 2099.

Noctua (Agrotis) multangula, *Meig. Syst. Besch.* iii. 82, 1, pl. 92, f. 6.

a—g. Europe. From M. Becker's collection.

6. Chersotis rectangula.

Canescens; thorax fusco varius, fascia antica nigra; alæ anticæ fusco conspersæ, maculis costalibus et basalibus, striga discali fasciis interruptis lunulisque marginalibus nigris, macula claviformi fusiformi, orbiculari rotunda, reniformi sublunata; posticæ cinereæ, ciliis albis.

Noctua rectangula, *Wien. Verz. M.* 15. *Fabr. Ent. Syst.* iii. 2, 187. *Bork. Eur. Schmett.* iv. 205. *Hübn. Eur. Schmett. Noct.* f. 110. *God. Hist. Nat. Lép. Fr.* ii. 248, pl. 68, f. 2

Agrotis rectangula, *Treit. Schmett.* i. 126.
Chersotis rectangula, *Boisd. Ind. Méth.* 103, 765. *Guen. Noct.* i 311, 518.

a—c. Europe. From M. Becker's collection.

7. Chersotis Anderreggii.

Ferruginea; abdomen testaceum; thorax fascia antica interrupta nigra; abdomen pallide cinereum; alæ anticæ maculis costalibus unaque basali nigris, claviformi elongata albido ex parte marginata, orbiculari et reniformi margine albido connexii macula nigra divisis; posticæ cinereæ, basi pallidiores.

Agrotis Anderreggii, *Boisd. Icon. Lép. d'Eur.* pl. 76, f. 6. *Guen. Noct.* i. 312, 519.
Agrotis rectangula, *var.*, *Boisd. Ind. Méth.* 103, 765. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 456, pl. 40, f. 3. *Eversm. Fauna. Volg-Ural.* 187. *Guen. Ann. Soc. Ent. Fr.* vi. 240.
Agrotis exclamans, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1841, pl. 3, f. 5, 6.

Switzerland.

a. Europe. From M. Becker's collection.

8. Chersotis deplana.

Mas. *Cinerea; antennæ pubescentes; thorax antice niger; alæ anticæ maculis discalibus nigris, lineis medianis remotis arcuatis, exteriore fusco bene determinato, striga atra interrupta discali, orbiculari et reniformi magnis fusco cinereis; posticæ ochraceo-cinereæ, margine nigricante.*

Agrotis deplana, *Herr.-Schæff. Schmett. Eur.* ii. pl. f. 79. *Guen. Noct.* i. 312, 520.

South Russia.

North America.

9. Chersotis quadrangula.

Thorax immaculatus; alæ anticæ cinereo-fuscæ, fascia postica obscuriore, maculisque parvis irregularibus sparsis unaque in medio quadrata distincta nigris; posticæ fuscæ.

Agrotis quadrangula, *Zett. Ins. Lapp.* 935, 4.

Greenland.

Africa.

10. Chersotis separata.

Rufo-fusca; frontis fasciculus et thorax antice nigri, lineis medianis parallelis valde remotis e lunulis nigricantibus, striga discali interrupta atra flavescente lineato, claviformi nulla, orbiculari et reniformi subæqualibus non marginatis, ciliis flavo lineatis; posticæ sordide albæ, venis margineque subfuscescentibus.

Agrotis separata, *Guen. Noct.* i. 313, 521.

Abyssinia.

Genus 8. OPIGENA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, porrecti, pilosi; articulus 3us conicus, brevissimus. Antennæ simplices, corporis dimidio multo longiores. Abdomen alas posticas perpaullo superans. Pedes validi; tibiæ anticæ breves; posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subconvexo vix obliquo.

Opigena, *Boisd. Ind. Méth.* 103.
Noctua, p., *Treit.*
Agrotis, p., *Guen. Noct.* i. 313.
Metaxya, p., *Hübn. Verz. Schmett.* 223.

Body stout. Proboscis moderately long. Palpi stout, porrect, pilose; third joint conical, not more than one-fourth of the length of the second. Antennæ simple in both sexes, much more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs stout; fore tibiæ short; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, slightly convex and hardly oblique along the exterior border.

1. Opigena polygona.

Cervina; thorax fusco fasciatus et bivittatus, fasciculis duobus posticis albidis; abdomen cinereo-albidum; alæ anticæ basi plaga discali liturisque costalibus nigro-fuscis, lineis transversis undulatis nigris, ocellis duobus nigro marginatis, fasciis duabus exterioribus ferrugineis; posticæ albidæ marginibus subcinereis.

——— ———, *Engr. Pap. d'Eur.* 423, a.
Noctua polygona, *Wien. Verz. M.* 16. *Fabr. Ent. Syst.* iii. 2, 333. *Hübn. Samml. Eur. Schmett. Noct.* f. 125. *God. Hist. Nat. Lép. Fr.* ii. 245, pl. 68.
Noctua nigrofulva, *Esp. Schmett.* iv. pl. 127, f. 7.
Noctua pyramis, *Bork. Eur. Schmett.* iv. 197.
Agrotis polygona, *Treit. Schmett. Eur.* i. 226. *Guen. Noct.* i. 313, 522.
Metaxya polygona, *Hübn. Verz. Schmett.* 223, 2241.
Opigena polygona, *Boisd. Ind. Méth.* 103, 764.

a—d. Europe. From M. Becker's collection.

Genus 9. EPILECTA.

Corpus vix robustum. Proboscis mediocriter longa. Palpi porrecti, validi, caput longe superantes; articulus 3us lanceolatus, 2i dimidio vix brevior. Antennæ simplices, graciles, corporis dimidio multo longiores. Abdomen alas posticas superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ, apud costam fere rectæ, margine exteriore subdenticulato subconvexo vix obliquo.

Epilecta, *Hübn. Verz. Schmett.* 221.
Triphæna, p., *Treit.; Boisd.; Meig.*
Hiria, *Dup. Cat.* 145. *Guen. Noct.* i. 314.

Body hardly stout. Proboscis moderately long. Palpi porrect, stout, extending far beyond the head; third joint lanceolate, almost half the length of the second. Antennæ simple, slender, much more than half the length of the body. Abdomen extending somewhat beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings somewhat broad. Fore wings almost straight in front, slightly denticulated and convex, and hardly oblique along the exterior border; first, second and third inferior veins nearly contiguous; fourth remote.

Epilecta differs much from the other genera in this family, and seems to connect them with the *Catocalidæ*.

1. Epilecta linogrisea.

Cinerea; thorax fasciis vittisque duabus nigris, disco cervino; alæ anticæ ferrugineo albidoque variæ, lineis transversis undulatis annulisque duobus nigris, fascia tenui submarginali cervina; posticæ luteæ, nigro marginatæ.

——— ———, *Engr. Pap. d'Eur.* 436, a—c.

Noctua linogrisea, *Wien. Verz.* 79, 22. *Fabr. Mant. Ins.* ii. 151, 118; *Ent. Syst.* iii. 2, 58, 160. *Esp. Schmett.* iv. pl. 108, f. 3. *Bork. Eur. Schmett.* iv. 116, 46. *Kléem, Beit. Ins. Gesch.* ii. pl. 7, f. 4, 5. *Hübn. Samml. Eur. Schmett. Noct.* pl. 21, f. 101; pl. 114, f. 531; *Larv. Lep.* iv. *Noct.* ii. *Gen.* G, b, f. 1, a. *God. Hist. Nat. Lép. Fr.* v. 149, pl. 57, f. 5.

Triphæna linogrisea, *Treit. Schmett. Eur.* v. 1, 272, 8. *Boisd. Ind. Méth.* 102, 756. *Guen. Ann. Soc. Ent. Fr.* vi. 239.

Phalæna (Noctua) linogrisea, *Gmel. ed. Syst. Nat.* i. 5, 2538, 1010.

Epilecta linogrisea, *Hübn. Verz. Schmett.* 221, 2209.

Hiria linogrisea, *Dup. Cat.* 145. *Guen. Noct.* i. 314, 523.

Tryphæna linogrisea, *Meig. Syst. Besch.* iii. 81, 6, pl. 96, f. 7; *Handb.* 158, 26, pl. 12, f. 8.

a—c. Europe. From M. Becker's collection.
d. France.

Genus 10. TRIPHÆNA.

Corpus robustum. Proboscis longiuscula. Palpi validi, pilosi, subascendentes; articulus 3us conicus, minimus. Antennæ simplices, corporis dimidio longiores. Abdomen latum, depressum, alas posticas paullo superans. Pedes validi, longiusculi; tibiæ anticæ breves; posticæ calcaribus quatuor longissimis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subangulatæ, margine exteriore subconvexo vix obliquo; posticæ luteæ, nigro marginatæ.

Triphæna, *Ochs. Syst. Gloss. Schmett. von Eur.* iv.; *Treit.; Boisd.; Dup.; Steph.; Guen. Ann. Soc. Ent. Fr.* vi. 565; *Noct.* i. 315.

Triphæna, Lampra et Euschesis, *Hübn. Verz. Schmett.* 221.

Body very stout. Proboscis rather long. Palpi stout, pilose, slightly ascending; third joint conical, very minute, less than one-sixth of the length of the second. Antennæ simple in both sexes, rather more than half the length of the body. Abdomen broad, flat, extending a little beyond the hind wings. Legs stout, rather long; fore tibiæ short; hind tibiæ with four very long spurs. Wings moderately broad. Fore wings straight in front, somewhat angular at the tips, slightly convex and very slightly oblique along the exterior border. Hind wings luteous, with black borders.

A. Alæ posticæ margine nigro latissimo.
  A. Statura major. - - - - - fimbria, *Linn.*
  B. Statura minor.
    A. Alæ anticæ cinereo-fuscæ. - - janthina, *Wien. Verz.*
    B. Alæ anticæ rufescentes. - - - interjecta, *Hübn.*
B. Alæ posticæ margine nigro sat lato aut sat angusto.
  A. Alæ posticæ macula nulla discali. - - pronuba, *Linn.*
  B. Alæ posticæ macula discali.
    A. Alæ anticæ macula nulla subapicali. - orbona, *Fabr.*
    B. Alæ anticæ macula costali subapicali. subsequa, *Wien. Verz.*

1. Triphæna fimbria.

Pallide cervina; abdomen luteum; alæ anticæ annulis duobus lineisque duobus transversis exterioribus canis striga obliqua interiore fasciaque media viridescentibus, puncto subapicali subcostali nigro; posticæ luteæ, nigro latissime marginatæ.

——— ———, *Engr. Pap. d'Eur.* 432, a, b, g, h. *Schreb. Ins.* 12, f. 9. *Kühn, Naturf.* 9, pl. 1, f. 3.

Phalæna-Noctua fimbria, *Linn. Syst. Nat.* ii. 842, 123. *Gmel. ed. Syst. Nat.* i. 5, 2539, 123. *Stew. El. Nat. Hist.* ii. 183. *Turt. Syst. Nat.* iii. 296.

Noctua fimbria, *Wien. Verz.* 78, 18. *Fabr. Sp. Ins.* ii. 223, 76; *Mant. Ins.* ii. 151, 123; *Ent. Syst.* iii. 259, 165. *Kléem, Beit. Ins. Gesch.* i. pl. 48. *Esp. Schmett.* iv. pl. 103, f. 1. *Bork. Eur. Schmett.* iv. 104, 41. *Donov. Nat. Hist. Brit. Ins.* vi. 69, pl. 208. *Hübn. Samml. Eur. Schmett. Noct.* pl. 22, f. 102; pl. 119, f. 551, 552; *Larv. Lep.* iv. *Noct.* ii. *Gen.* G, b, f. 1, a. *Panz. Faun. Germ.* xii. 17, 18. *God. Hist. Nat. Lép. Fr.* v. pl. 60, f. 1, 2. *Haw. Lep. Brit.* 161.

Noctua Solani, *Fabr. Mant. Ins.* ii. 150, 117; *Ent. Syst.* iii. 59.

Phalæna domiduca, *Hufnagle, Berl. Mag.* iii. 404.

Phalæna-Noctua Solani, *Gmel. ed. Syst. Nat.* i. 5, 2538, 1009.

Lampra fimbria, *Hübn. Verz. Schmett.* 221, 2215.

Triphæna fimbria, *Treit. Schmett.* v. 1, 266, 6. *Steph. Ill. Brit. Ent. Haust.* ii. 105, 5. *Westw. & H. Brit. Moths*, i. 108, pl. 21, f. 6, 7. *Boisd. Ind. Méth.* 102, 760. *Guen. Noct.* i. 318, 526. *Herr.-Schæff. Schmett. Eur.* i. 328, 440.

Tryphæna fimbria, *Meig. Syst. Besch.* iii. 781, pl. 96, f. 2; *Handb.* 157, 25, pl. 12, f. 7.

a—m. England. From Mr. Stephens' collection.
n. England. From Mr. Foxcroft's collection.
o—t. England.

v—x. Europe. From M. Becker's collection.
y. Europe. From Mr Milne's collection.

2. TRIPHÆNA PRONUBA.

Alæ anticæ obscuræ, coloribus variæ, macula costali subapicali nigra, orbiculari et reniformi magnis; posticæ luteæ, margine nigro.

——— ———, *Göed. Ins.* i. pl. 14. *List. Göed.* (*Angl.*) 52, f. 41. (*Lat.*) 114, f. 41. *Rai, Ins.* 137, 18. *Albin, Nat. Hist. Engl. Ins.* pl. 72, f. a—d. *Wilkes*, pl. 9, f. 7. *Harr. Aur.* pl. 39, f. d—f. *Exp.* 21, pl. 5, f. 2. *Roës. Ins. Bel.* iv. pl. 32. *Réaum. Ins.* i. pl. 41, f. 4; ii. pl. 14, f. 189. *Geoff. Ins. Par.* ii. 146, 76. *Blank. Ins.* pl. 6, f. D, E. *Deg. Ins.* i. pl. 5, f. 17, 18; ii. 392, 1. *Schæff. Icon.* ii. pl. 196, f. 1, 2. *Engr. Pap. d'Eur.* 434, a—d. *Frisch. Ins.* 10, pl. 15, f. 4. *Merian. Ins. Eur.* pl. 49. *Ammir.* pl. 8.

Phalæna-Noctua pronuba, *Linn. Syst. Nat.* ii. 842, 121; *Faun. Suec.* 1167. *Scop. Ent. Carn.* 518. *Gmel. ed. Syst. Nat.* i. 5, 2537, 121. *Berk. Syn. Nat. Hist. Brit.* i. 141. *Stew. Elem. Nat. Hist.* ii. 183. *Turt. Syst. Nat.* iii. 295. *Scop. Ent. Carn.* 518.

Noctua pronuba, *Wien. Verz.* 79, 20. *Fabr. Sp. Ins.* ii. 221, 73; *Mant. Ins.* ii. 150, 115; *Ent. Syst.* iii. 2, 56, 155. *Esp. Schm.* iv. pl. 102, f. 1. *Bork. Eur. Schm.* iv. 97, 39. *Donov. Nat. Brit. Ins.* ix. 49, pl. 311. *Haw. Lep. Brit.* 160. *Hübn. Samml. Eur. Schmett. Noct.* pl. 22, f. 103; *Larv. Lep.* iv, *Noct.* ii. *Gen.* G, b, f. g, 2 a, b. *God. Lép. Fr.* v. pl. 58.

Tryphæna innuba, *Meig. Handb.* 157, 24.

Tryphæna pronuba, *Meig. Syst. Besch.* iii. 79, 2, pl. 96, f. 1, a, b; *Handb.* 156, 23.

Triphæna pronuba, *Hübn. Verz. Schmett.* 221, 2214. *Treit. Schmett.* v. 1, 260, 4. *Steph. Ill. Brit. Ent. Haust.* ii. 103, 2. *Boisd. Ind. Méth.* 102, 763. *Guen. Noct.* i. 320, 530. *Westw. & H. Brit. Moths*, i. 108, pl. 21, f. 1—3.

Var. Triphæna innuba, *Ochs. Treits*, v. 265, 5. *Steph. Ill. Brit. Ent. Haust.* ii. 104, 4.

a. England. Presented by W. Wing, Esq.
b—aa. England. From Mr. Stephens' collection.
bb—ff. England.
gg—jj. Europe. From M. Becker's collection.
kk. Europe. From Dr. Leach's collection.

3. Triphæna orbona.

Cinereo-cervina aut ochracea; alæ anticæ orbiculari et reniformi magnis; posticæ luteæ, lunula discali marginequé nigris.

Noctua orbona, *Fabr. Mant. Ins.* ii. 150, 116; *Ent. Syst.* iii. 57, 158. *Haw. Lep. Brit.* 161. *Donov. Nat. Hist. Brit. Ins.* x. 36, pl. 343, f. 2. *God. Hist. Nat. Lép. Fr.* v. pl. 59, f. 2—5.
Noctua comes, *Hübn. Eur. Schmett. Noct.* pl. 111, f. 521; *Larv. Lep.* iv. *Noct.* ii. *Gen.* G, b f. 1, a.
Noctua subsequa, *Esp. Schmett. Beschreib.* iv. pl. 104, f. 1—3. *Bork. Eur. Schmett.* iv. 102, 40. *Haw. Lep. Brit.* 161.
Noctua pronuba minor, *Vill. Ent. Linn.* ii. 279.
Phalæna (Noctua) orbona, *Gmel. ed. Syst. Nat.* i. 5, 2538, 1008.
Triphæna orbona, *Steph. Ill. Brit. Ent. Haust.* ii. 102, 1. *Boisd. Ind. Méth.* 102, 761. *Guen. Noct.* i. 319, 529. *Westw. & H. Brit. Moths*, i. 108, pl. 21, f. 1. *Herr.-Schaff. Schmett. Eur.* i. 328, 444.
Triphæna comes, *Hübn. Verz. Schmett.* 221, 2212. *Treit. Schmett.* 254, 3.
Tryphæna comes, *Meig. Handb.* 156, 22.
Tryphæna subsequa, *Meig. Sgst. Besch.* iii. 79, 3, pl. 96, f. 3, 4.
Var. Triphæna consequa, *Curt. Brit. Ent.* viii. pl. 348.
Triphæna Curtisii, *Newm. Zool.* ii. 399.

a—d. England. Presented by H. Doubleday, Esq.
e—w. England. From Mr. Stephens' collection.
x, y. England.
z—aa. Europe. From M. Becker's collection.
bb, cc. Europe. From Mr. Milne's collection.

4. Triphæna subsequa.

Cervino-cinerea; abdomen subcervinum; alæ anticæ nigro conspersæ ocellis duobus discalibus testaceis nigro marginatis, lineis duabus transversis undulosis exterioribus fuscis, guttis duabus costalibus maculaque subcostali subapicali nigris; posticæ luteæ, lunula discali fasciaque submarginali atris.

Noctua subsequa, *Wien. Verz.* 79, 21. *Hübn. Eur. Schmett. Noct.* pl. 23, f. 106.
Noctua consequa, *Hübn. Eur. Schmett. Noct.* pl. 23, f. 105.

Triphæna subsequa, *Hübn. Verz. Schmett.* 221, 2211. *Treit. Schm.* 258, 3. *Steph. Ill. Brit. Ent. Haust.* ii. 103, 2. *Boisd. Ind. Méth.* 102, 662. *Guen. Noct.* i. 319, 528. *Herr.-Schæff. Schmett. Eur.* ii. 329, 445.

Triphæna consequa, *Hübn. Verz. Schmett.* 221, 2213.

a. England (New Forest). From Mr. Turner's collection.
b, c. England.
d. Europe. From M. Becker's collection.
e. Europe.

5. Triphæna interjecta.

Testaceo-fulva; alæ anticæ lineis transversis subobsoletis obscurioribus, ciliis nigricantibus; posticæ luteæ, nigro late marginatæ.

Noctua interjecta, *Hübn. Samml. Eur. Schmett. Noct.* pl. 23, f. 107. *Haw. Lep. Brit.* 162. *Ochs. Schmett. von Eur.* iv. 69. *God. Hist. Nat. Lép. Fr.* v. 154, pl. 59, f. 1.

Triphæna interjecta, *Hübn. Verz. Schmett.* 221, 2210. *Treit. Schmett. Eur.* v. 1, 253, 1. *Steph. Ill. Brit. Ent. Haust.* ii. 105, 6. *Frey. Neu. Beit. Schmett.* iii. pl. 292. *Boisd. Ind. Méth.* 102, 758. *Herr.-Schæff. Schmett. Eur.* ii. 328, 443. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 318, 527. *Westw. & H. Brit. Moths*, i. 109, pl. 21, f. 8.

Tryphæna interjecta, *Meig. Syst. Besch.* iii. 80, pl. 96, f. 5.

a—g. England. From Mr. Stephens' collection.
h—l. England.
m, n. Europe. From M. Becker's collection.
o, p. Europe. From Mr. Milne's collection.

6. Triphæna janthina.

Fusco-ferruginea; caput, thorax anticus et pectus viridescentia; proboscis albida; antennæ subtus fulvescentes; alæ anticæ annulis duobus albidis, costa ex parte fasciisque duabus exterioribus canis; posticæ luteæ, basi fuscæ, margine lato nigro.

——— ———, *Geoff. Ins. Par.* ii. 148. *Engr. Pap. d'Eur.* 433, a—f.

Noctua janthina, *Wien. Verz.* 78, 19. *Fabr. Mant. Ins.* ii. 152, 124; *Ent. Syst.* iii. 2, 59, 166. *Esp. Schmett.* iv. pl. 104, f. 4, 5. *Bork. Eur. Schmett.* iv. 109, 42. *Haw. Lep. Brit.* 7. *Hübn. Samml. Eur. Schmett. Noct.* pl. 21, 100. *Donov. Nat. Hist. Brit. Ins.* pl. 343. *God. Hist. Nat. Lép. Fr.* v. pl. 59, f. 6.

Noctua domiduca, *Knock, Beit. Ins.* i. 63, pl. 4, f. 5. *Fuessl. Mag Ent.* iii. pl. 16.
Triphæna janthina, *Treit. Schmett. Eur.* v. 1, 269, 7. *God. Hist. Nat. Lép. Fr.* ii. 160, pl. 59. *Boisd. Ind. Méth.* 102, 759. *Guen. Noct.* i. 317, 525. *Steph. Ill. Brit. Ent. Haust.* ii. 106. *Westw. & H. Brit. Moths*, i. 109, pl. 21, f. 9. *Herr.-Schæff. Schmett. Eur.* ii. 328, 441.
Euschesia janthina, *Hübn. Verz. Schmett.* 221, 2216.
Tryphæna janthina, *Meig. Syst. Besch.* iii. 80, 5, pl. 96, f. 6.

a—d. England. Presented by H. Doubleday, Esq.
e—o. England. From Mr. Stephens' collection.
p. q. England. From Mr. Foxcroft's collection.
r. England.
s—w. Europe. From Mr. Becker's collection.

Genus 11. GRAPHIPHORA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, porrecti, pilosi; articulus 2us 3o triplo aut quadruplo longior; 3us cylindricus aut conicus. Antennæ corporis dimidio longiores aut multo longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam vix convexæ, apice subrotundatæ, margine exteriore subconvexo vix obliquo. *Mas.*—Antennæ simplices, crenulatæ, aut subpectinatæ.

Noctua, *Guen. Ann. Soc. Ent. Fr.* vi. 361; *Noct.* i. 321.
Caradrina, p., *Treit.; Meig.*
Noctua, p., et Graphiphora, *Ochs.; Treit.; Steph.*
Eugraphe, Megasema, Exarnis, Diarsia, Euxoa, Amathes, et Caradrina, p., *Hübn. Verz. Schmett.*
Agrotis, p., Polia, p., et Orthosia, p., *Herr.-Schæff.*
Noctua, Spælotis, p., Chersotis, p., et Orthosia, p., *Boisd. Ind. Méth.*
Cænophila, *Steph.*
Lytæa, p., *Steph.*
Segetia, p., *Steph.*

Body stout. Proboscis moderately long. Palpi stout, porrect, pilose; third joint cylindrical or conical, one-third or one-fourth of the length of the second. Antennæ more or much more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings

moderately broad. Fore wings hardly convex in front; apical angle somewhat rounded; exterior border slightly convex, very slightly oblique. *Male.*—Antennæ simple, crenulate, or slightly pectinated.

Europe.

Group 1.

Color cinereus. Alæ anticæ lituris nigris plus minusve determinatis.

Colour cinereous. Fore wings with more or less conspicuous black marks.

1. Graphiphora margaritacea.

Cinerea; alæ anticæ strigis tribus geminis, umbra media et lineæ undulatæ umbra interiore in margine antico incrassatis, macula quadrata nigra perparva; posticæ albidæ.

——— ———, *Engr. Pap. d'Eur.* 416, c.

Noctua margaritacea, *Bork. Eur. Schmett.* iv. 98. *Guen. Noct.* i. 323, 532.

Noctua glareosa, *Treit. Schmett. Eur.* ii. 247. *Frey. Neu. Beit. Schmett.* ii. pl. 185. *Costa, Faun. Nap.* 19. *Boisd. Ind. Méth.* 106, 794. *Guen. Ann. Soc. Ent. Fr.* vi. 239.

Noctua I-intactum, *Hübn. Samml. Eur. Schmett. Noct.* f. 130. *Dup. Hist. Nat. Lép. Fr.* iii. 75, pl. 77, f. 3, 4.

Agrotis margaritacea, *Herr.-Schæff. Schmett. Eur.* ii. 331, 451.

Eugraphe I-intactum, *Hübn. Verz. Schmett.* 224, 2245.

France. Switzerland.

2. Graphiphora candelisequa.

Cana; abdomen albidum; alæ anticæ disco fuscescente, lituris costalibus lineisque duabus transversis angulosis nigricantibus; fuscedo exciturís duabus anticis subquadratis; alæ posticæ albidæ marginibus latissimis cinereis.

Noctua candelisequa, *Wien. Verz.* 72, 5. *Hübn. Samml. Eur. Schmett. Noct.* pl. 85, f. 397. *Treit. Schmett. Eur.* v. 217, 5. *Dup. Hist. Nat. Lép. Fr.* vi. 72, pl. 77, f. 2. *Boisd. Ind. Méth.* 106, 793. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 323, 533.

Noctua (Agrotis) candelisequa, *Meig. Syst. Besch.* i. 97, 29, pl. 98, f. 5.
Euxoa candelisequa, *Hübn. Verz. Schmett.* 209, 2093.
Agrotis candelisqua, *Herr.-Schæff. Schmett. Eur.* ii. 352, 452.
a—d. Europe. From M. Becker's collection.

3. Graphiphora chaldaica.

Pallide cinerea; abdomen albidum; alæ anticæ apud costam albidæ, cupreo subnitentes, strigis tribus transversis nigris, maculis ordinariis cupreis triangulis nigris interne coadunatis; posticæ albæ.

Noctua chaldaica, *Kinderm. Boisd. Ind. Méth.* 1126. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 481, pl. 41. *Frey. Neu. Beit. Schmett.* iv. pl. 304, f. 1. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 324, 534.
Orthosia chaldaica, *Herr.-Schæff. Eur. Schmett.* ii. 199, 51; ii. *Noct.* pl. 23, f. 110.
South Russia.
a. Europe. From M. Becker's collection.

4. Graphiphora glareosa.

Albida; alæ anticæ canæ, lituris quatuor costalibus punctisque paucis discalibus nigris. Mas.—*Alæ posticæ albæ.* Fœm.—*Alæ posticæ albidæ, cinereo marginatæ.*

——— ———, *Engr. Pap. d'Eur.* 416, a, b.
Noctua glareosa, *Esp. Schmett.* 387, pl. 128, f. 3. *Boisd. Ind. Méth.* 106, 794. *Guen. Noct.* i. 324, 535.
Caradrina glareosa, *Treit. Schmett.* v. 2, 2471.
Orthosia glareosa, *Treit. Schmett. Eur. Suppl.* x. 79.
Graphiphora glareosa, *Steph. Ill. Brit. Ent. Haust.* ii. 159, pl. 21, f. 1. *Herr.-Schæff. Eur. Schmett.* ii. 199, 52.
Noctua hebraica, *Hübn. Samml. Eur. Schmett. Noct.* pl. 140, f. 642, 643. *Frey. Neu. Beit. Schmett.* iii. pl. 201, f. 2, 3.
Eugraphe glareosa, *Hübn. Verz. Schmett.* 224, 2246.
Noctua decempunctata? *Vill.* pl. 5, f. 17.
Noctua I-geminum, *Dup. Hist. Nat. Lép. Fr.* iii. 80, pl. 77, f. 6.
Noctua (Caradrina) glareosa, *Meig. Syst. Besch.* iii. 121, 70, pl. 98, f. 6, 7.

a—j. England. From Mr. Stephens' collection.
k, l. England. From Mr. Carter's collection.
m. England.
n—p. Europe. From M. Becker's collection.

5. Graphiphora depuncta.

Cervino-testacea; alæ anticæ maculis basalibus nigris, fasciis duabus punctisque exterioribus cinereis, maculis pallidiore marginatis, orbiculari magna obliqua subelliptica; posticæ fusco-cinereæ, ciliis testaceis.

Phalæna-Noctua depuncta, *Linn. Faun. Suec.* 1214.
Noctua depuncta, *Fabr. Ent. Syst.* iii. 2, 109, 327. *Esp. Schmett.* pl. 177, f. 3. *Treit. Schmett. Eur.* i. 229. *God. Hist. Nat. Lép. Fr.* ii. 191, pl. 62. *Frey. Neu. Beit. Schmett.* 118, pl. 166; *Ent. Zeit. Stett.* ii. 93. *Boisd. Ind. Méth.* 105, 781. *Guen. Noct.* i. 324, 536.
Noctua mendosa, *Hübn. Schmett. Eur. Noct.* pl. 26, f. 120; pl. 107, f. 502.
Eugraphe depuncta, *Hübn. Verz. Schmett.* 324, 536.
Graphiphora depuncta, *Steph. Ill. Brit. Ent. Haust.* ii. 133. *Westw. & H. Brit. Moths*, i. 130, pl. 26, f. 14.

a, b. Carlisle. Presented by J. B. Hodgkinson, Esq.
c, d. England. From Mr. Stephens' collection.
e—g. Europe. From M. Becker's collection.

Group 2.

Alæ anticæ ferruginosæ, lineis transversis non bene determinatis; orbicularis et reniformis sæpissime nigro marginatæ.

Fore wings more or less ferruginous, with slight transverse lines; orbicular and reniform spots generally bordered with black.

6. Graphiphora Augur.

Ferrugineo-fusca; abdomen fusco cinerascens; alæ anticæ claviformi, orbiculari et reniformi nigro marginatis, claviformi elongata, orbiculari ovata, lineis transversis subobsoletis; posticæ cinereo-fuscæ.

Phalæna-Noctua Augur, *Gmel. ed. Syst. Nat.* i. 5, 2539, 1017.
Noctua Augur, *Fabr. Sp. Ins.* ii. 223, 77; *Mant. Ins.* ii. 152, 127; *Ent. Syst.* iii. 2, 61, 170. *Bork. Eur. Schmett.* iv. 209, 95. *Treit. Schmett.* v. 210, 3. *Hübn. Eur. Schmett. Noct.* pl. 31, f. 148. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 73, f. 6. *Haw. Lep. Brit.* 172. *Guen. Noct.* i. 325, 537.

Noctua (Agrotis) Augur, *Meig. Handb.* 155, 19; *Syst. Beech.* iii. 96, 27, pl. 98, f. 8.
Noctua assimulans, *Scriba, Beitr. Ins. Gesch.* iii. pl. 18, f. 6. *Bork. Eur. Schmett.* iii. 209, 96.
Noctua Omega, *Esp. Schmett.* iv. pl. 131, f. 2. *Bork. Eur. Schmett.* iv. 232.
Noctua Hippophaes, *Hübn. Eur. Schmett. Noct.* f. 782.
Exarnis Augur, *Hübn. Verz. Schmett.* 225, 2261.
Spælotis augur, *Boisd. Ind. Méth.* 106, 797.
Graphiphora augur, *Steph. Ill. Brit Ent. Haust.* ii. 131. *Westw. and H. Brit. Moths*, i. 127, pl. 25, f, 6, 7.

a. England. Presented by H. Doubleday, Esq.
b—k. England. From Mr. Stephens' collection.
l—o. England.
p—r. Europe. From M. Becker's collection.
s. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.
t—z. Trenton Falls, New York. Presented by E. Doubleday, Esq.

7. Graphiphora Sigma.

Nigro-fusca; caput et thorax anticus cervina; abdomen cinereum; alæ anticæ costa lineisque transversis undulatis cervinis, annulis duobus connexis unoque minore posteriore nigris; posticæ cinereæ.

——— ———, *Engr. Pap. d'Eur.* 542, a, b.
Noctua sigma, *Wien. Verz.* 78, 8. *Hübn. Samml. Eur. Schmett. Noct.* f. 122. *Treit. Schmett. Eur.* i. 212. *Frey. Beit. Gen. Eur. Schmett.* pl. 124. *Boisd. Ind. Méth.* 106, 796. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 325, 538.
Noctua Signum, *Fabr. Ent. Syst.* iii. 2, 65, 184. *God. Hist. Nat. Lép. Fr.* ii. 209, pl. 64, f. 1.
Noctua umbra, *View. Verz. Schmett.* 103. *Hübn. Beit.* pl. 3, O.
Noctua characterea, *Esp. Schmett. Text. Bork. Eur. Schmett.* iv. 207.
Noctua ditrapezium, *Esp. Schmett.* iv. pl. 147, f. 1, 2.
Noctua nubila, *Esp. Schmett.* iv. pl. 142, f. 3.
Eugraphe characterea, *Hübn. Verz. Schmett.* 224, 2243.

a, b. Europe. From M. Becker's collection.

Group 3.

Alæ anticæ sæpissime ferrugineæ aut rufescentes, striga aut macula discal inigra.

Fore wings generally ferruginous or reddish, with a black discal streak, or a black mark between the orbicular and reniform spots.

A. Alæ anticæ macula costali subapicali nigra.
  A. Alæ posticæ albidæ. - - - - C-nigrum, *Linn.*
  B. Alæ posticæ subtestaceæ, margine cinereo. ditrapezium, *Hübn.*
  C. Alæ posticæ cinereæ.
    A. Alæ anticæ maculis duabus discalibus nigris. triangulum, *Hufn.*
    B. Alæ anticæ macula una discali nigra. - collina, *Boisd.*
B. Alæ anticæ macula nulla costali nigra.
  A. Alæ anticæ obscuriores.
    A. Alæ posticæ ciliis obscurioribus. - brunnea, *Wien. Verz.*
    B. Alæ posticæ ciliis pallidioribus.
      a. Alæ anticæ maculis discalibus nigricantibus. rhomboidea, *Treit.*
      b. Alæ anticæ macula discali fusca. - conflua, *Treit.*
      c. Alæ anticæ maculis nullis obscurioribus. Dahlii, *Hübn.*
  B. Alæ anticæ pallidiores. - - - festiva, *Wien. Verz.*

8. Graphiphora C-nigrum.

Fusca; thoraxæ fascia obscuriore, anticæ viridescens; abdomen albidum; alæ anticæ cinereæ, lituris costalibus nigris, plaga costali albida nigro marginata, lineis transversis subundulatis cervinis nigro marginatis; posticæ albidæ, cinereo late marginatæ.

——— ———, *Engr. Pap. d'Eur.* 424, a—c.

Phalæna-Noctua C-nigrum, *Linn. Faun. Suec.* 1193. *Clerck, Icon.* pl. 1, f. 3. *Gmel. ed. Syst. Nat.* i. 5, 2542, 162.

Noctua C-nigrum, *Wien. Verz.* 77, 7. *Fabr. Mant. Ins.* ii. 154. 140; *Ent. Syst.* iii. 265, 183. *Knock, Beit. Ins.* iii. pl. 5, f. 1. *Bork. Eur. Schmett.* iv. 492, 194. *Hübn. Samml. Eur. Schmett. Noct.* pl. 24, f. 111. *Haw. Lep. Brit.* 191. *Treit. Schmett. Eur.* v. 237, 13. *God. Hist. Nat. Lép. Fr.* ii. 177, pl. 6, f. 1. *Boisd. Ind. Méth.* 104, 777. *Guén. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 328, 545. *Meig. Syst. Besch.* iii. 100, 34, pl. 93, f. 4.

Bombyx nun-atrum, *Esp. Schmett.* Texte 385. *Bork. Eur. Schmett.* 195.
Noctua gothica, *var.* singularis, *Esp. Schmett.* iii. pl. 76, f. 3.
Megasema C-nigrum, *Hübn. Verz. Schmett.* 223, 2231.
Graphiphora C-nigrum, *Steph. Ill. Brit. Ent. Haust.* ii. 136. *Westw. & H. Brit. Moths*, i. 132, pl. 26, f. 4, 5.

a—k. England. From Mr. Stephens' collection.
l—p. England.
q—s. Europe. From M. Becker's collection.
t—u. North America. Presented by Major-General Hardwicke.
w—z. United States. Presented by E. Doubleday, Esq.
aa—dd. Nova Scotia. From Lieut. Redman's collection.
ee. ——— ?

9. Graphiphora ditrapezium.

Rubido-ferruginea; thorax linea transversa albida; abdomen testaceum, apice cervinum; alæ anticæ apud costæ dimidium basale canescentes, guttis basalibus, maculis duabus subquadratis discalibus strigaque exteriore costali nigricantibus, lineis duabus transversis arcuatis fuscescentibus; posticæ pallide testaceæ, margine lato cinereo-fusco.

Noctua ditrapezium, *Bork. Schmett. Eur.* iv. 515, 206. *Wien. Verz.* 312, 8, 9? *Hübn. Samml. Eur. Schmett. Noct.* pl. 100, f. 472. *Treit. Schmett. Eur. Suppl.* x. 36. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 329, 547.
Noctua tristigma, *Och. Syst. Gloss. Schm. Von. Eur.* iv. *Treit. Schmett. Eur.* v. 253, 15. *Boisd. Ind. Méth.* 105, 778.
Megasema ditrapezium, *Hübn. Verz. Schmett.* 223, 2229.
Graphiphora ditrapezium, *Steph. Cat. Brit. Lep.* 71.

a, b. Europe. From M. Becker's collection.

10. Graphiphora triangulum.

Ferrugineo-cinereæ; thorax antice pallidior; alæ anticæ lineis transversis undulatis conspicuis, guttis costalibus, macula subapicali, macula divisa basali plagaque discali nigris, orbiculari obliqua; posticæ cinereæ, ciliis testaceis.

——— ———, *Engr. Pap. d'Eur.* 427, a.
Noctua triangulum, *Hufn. Berl. Mag.* 1766, 58. *Treit. Schmett. Eur.* i. 240. *Boisd. Ind. Méth.* 165, 779. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 329, 548. *Meig. Syst. Beschr.* iii. 101, 35, pl. 93, f. 2, 3.

Noctua Signa, *Esp. Schmett.* iv. pl. 186, f. 1, 3. *Knock, Beit. Ins.* iii. pl. 4, f. 7. *Bork. Eur. Schmett.* iv. 193. *Hübn. Samml. Exot. Schmett. Noct.* pl. 106, f. 497. *Kléem, Beit. Ins. Gesch.* ii. pl. 10. *Haw. Lep. Brit.* 190. *God. Hist. Nat. Lép. Fr.* ii. 197, pl. 60.

Megasema triangulum, *Hübn. Verz. Schmett.* 222, 2227.

Graphiphora triangulum, *Steph. Ill. Brit. Ent. Haust.* ii. 133. *Westw. & H. Brit. Moths*, i. 130, pl. 26, f. 3.

s—q. England. From Mr. Stephens' collection.
r—t. England.
v—w. Europe. From M. Becker's collection.
z—cc. Trenton Falls, New York. Presented by E. Doubleday, Esq.
dd. ——— ?

11. Graphiphora rhomboidea.

Fusca; abdomen cinereum; alæ anticæ purpurascente-fuscæ, annulis duobus lineisque transversis undulatis nigris; posticæ cinereæ, margine obscuriore. Mas.—*Thorax nigro-fuscus; alæ anticæ annulis lineisque cervino ex parte marginatis.*

——— ———, *Engr. Pap. d'Eur.* 425, a.

Noctua rhomboidea, *Esp. Schmett.* iv. pl. 149, f. 3. *Treit. Schmett. Eur.* v. 234, 11. *God. Hist. Nat. Lép. Fr.* v. 193, pl. 62, f. 5. *Meig. Syst. Besch.* iii. 99, 32, pl. 93, f. 5. *Frey. Neu. Beit. Schmett.* iv. pl. 309. *Boisd. Ind. Méth.* 105, 780. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 330, 549.

Noctua stigmatica, *Hübn. Samml. Eur. Schmett. Noct.* pl. 100, f. 470, 471.

Megasema stigmatica, *Hübn. Verz. Schmett.* 223, 2230.

Graphiphora tristigma, *Steph. Ill. Brit. Ent. Haust.* ii. 132. *Westw. & H. Brit. Moths*, i. 129, pl. 26, f. 10.

Graphiphora rhomboidea, *Steph. Cat. Brit. Lep.* 71.

s—l. England. From Mr. Stephens' collection.
m—o. England.
p—s. Europe. From M. Becker's collection.

12. Graphiphora brunnea.

Rubiginea; abdomen rufescens, basi cinereum; alæ anticæ subpurpurascentes fasciis duabus obscurioribus testaceo submarginatis, litura discali testacea; posticæ cinerascentes, margine obscuriore, ciliis rufescentibus.

Phalæna (Noctua) arvensis, *Gmel. ed. Syst. Nat.* i. 5, 2569, 1153.
Noctua brunnea, *Wien. Verz.* 83, 15. *Fabr. Mant. Ins.* ii. 16
223; *Ent. Syst.* iii. 2, 94, 278. *Hübn. Samml. Eur. Schme*
Noct. pl. 26, f. 121. *Haw. Lep. Brit.* 189. *Treit. Schme*
Eur. v. 219, 6. *God. Hist. Nat. Lép. Fr.* ii. 183, pl. 61, f.
Meig. Syst. Besch. iii. 98, 30, pl. 93, f. 3. *Frey. Beit. Ge*
Eur. Schmett. pl. 58. *Boisd. Ind. Méth.* 105, 792. *Gue*
Ann. Soc. Ent. Fr. vi. 239. *Noct.* i. 330, 550.
Diarsia brunnea, *Hübn. Verz. Schmett.* 222, 2224.
Noctua lucifera, *Esp. Schmett.* iv. pl. 142, f. 6; pl. 188, f. 4, 5.
Noctua Fragariæ, *Bork. Schmett.* iv. 497, 196.
Graphiphora brunnea, *Steph. Ill. Brit. Ent. Haust.* ii. 131. *Westw*
& H. Brit. Moths, i. 128, pl. 25, f. 11.

a, b. England (Carlisle): Presented by J. B. Hodgkinson, Esq.
c—s. From Mr. Stephens' collection.
t. Scotland. From Mr. Foxcroft's collection.
v—x. Europe. From M. Becker's collection.

13. Graphiphora festiva.

Cinereo-cervina; abdomen pallide cinereum; alæ anticæ a
parte pallidiores, annulis duabus discalibus subquadrati
lineis transversis undulatis guttisque marginalibus fuscis
posticæ pallidiores, margine fuscescente.

Noctua festiva, *Wien. Verz.* 314, 7, 8. *Treit. Schmett.* v. 224, 8
Hübn. Eur. Schmett. Noct. pl. 24, f. 114; pl. 99, f. 467. *God*
Hist. Nat. Lép. Fr. v. 61, pl. 6, f. 5. *Meig. Syst. Besch.* iii. 98
31. pl. 94, f. 4. *Boisd. Ind. Méth.* 105, 790. *Guen. Noct.* i
331, 551.
Noctua mendica, *Fabr. Ent. Syst.* iii. 2, 93, 276.
Noctua Primulæ, *Esp. Schmett.* iv. pl. 136, f. 5, 6. *Bork. Eur*
Schmett. iv. 511, 204.
Graphiphora festiva, *Steph. Ill. Brit. Ent. Haust.* ii. 134. *Westw*
& H. Brit. Moths, i. 131, pl. 25, f. 12.
Noctua congener, *Hübn. Samml. Eur. Schmett.* 617.
Noctua punicea, *Hübn. Samml. Eur. Schmett.* 115.
Noctua festiva, var. A. congener, *Guen. Noct.* i. 331.
Diarsia festiva, *Hübn. Verz. Schmett.* 222, 2222.
Diarsia punicea, *Hübn. Verz. Schmett.* 222, 2225.
Var. Noctua subrufa, *Haw. Lep. Brit.* 227.
Noctua Dahlii, *God. Hist. Nat. Lep. Fr.* v. 189, pl. 62, f. 1, 2.

Polia congener, *Herr.-Schæff. Eur. Schmett.* ii. 267, 263.

i. England. Presented by E. W. Duck, Esq.
ii. England. From Mr. Stephens' collection.
iii. England.
iv. Europe. From M. Becker's collection.

G. congener and *G. festiva* may perhaps be two distinct species.

14. Graphiphora collina.

Ferruginea; abdomen cinereum; alæ anticæ fasciis pallidioribus et nigricantibus, lituris basalibus et discalibus unaque costali subapicali nigris; posticæ cinereæ, basi pallidiores.

Noctua collina, *Boisd. Ind. Méth.* 105, 789. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 331, 552. *Herr.-Schæff. Schmett. Eur.* pl. 29, f. 142.

Alps of South France and of South Switzerland.

15. Graphiphora conflua.

Ferruginea; abdomen cinereum; alæ anticæ fasciis nonnullis pallidioribus fuscisque, maculaque discali fusca; posticæ nigro-cinereæ, basi pallidiores.

Noctua conflua, *Treit. Schmett. Eur.* vi. 1, 405; *Suppl.* x. 35. *Frey. Beit. Ges. Eur. Schmett.* pl. 98, f. 1. *Dup. Hist. Nat. Lép. Fr.* iv. 140, pl. 109. *Boisd. Icon. Lép. d'Eur.* pl. 83; *Ind. Méth.* 105, 784. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 331, 553. *Herr.-Schæff. Schmett. Eur.* pl. 31, f. 154.

Prussia. Iceland.

16. Graphiphora Dahlii.

Rufo-rosea; abdomen cinereum, lateribus rufescentibus; alæ anticæ lineis transversis subobsoletis canis, guttis nonnullis apud venas nigris, orbiculari magna elliptica, reniformi ex parte albida; posticæ cinereæ, ciliis testaceis.

Noctua Dahlii, *Hübn. Eur. Schmett. Noct.* pl. 99, 465, 466. *Treit. Schmett. Eur.* i. 222. *God. Hist. Nat. Lép. Fr.* ii. 189, pl. 62, f. 2. *Eversm. Faun. Volg-Ural.* 209. *Boisd. Ind. Méth.* 105, 791. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 332, 554.

Noctua erythrocephala, *Haw. Lep. Brit.* 227, 196.
Graphiphora Dahlii, *Steph. Ill. Brit. Ent. Haust.* ii. 134. *Westw. & H. Brit. Moths*, i. 131, pl. 25, f. 12.
Diarsia Dahlii, *Hübn. Verz. Schmett.* 222, 2221.
Var. Graphiphora candelisequa, *Steph. Ill. Brit. Ent. Haust.* ii. 132.

a. England. Presented by J. C. Dale, Esq.
b—q. England. From Mr. Stephens' collection.
r, s. England. From Mr. Carter's collection.
t—u. England.
w. Europe. From M. Becker's collection.
x. New York. Presented by E. Doubleday, Esq.

Group 4.

Alæ anticæ lituris indistinctis; striga obscura discali bene determinata; orbicularis et reniformis pallidæ, vix distinctæ. *Mas.*—Antennæ subpectinatæ. *Fœm.*—Antennæ simplices.

Fore wings with the usual marks indistinct; the dark discal streak more apparent; orbicular and reniform spots pale, not well defined. *Male.*—Antennæ slightly pectinated. *Female.*—Antennæ simple.

17. Graphiphora subrosea.

Rufo-testacea; abdomen testaceum; alæ anticæ roseo conspersæ, lineis transversis undulatis, maculis costalibus strigaque lata discali ferrugineis, orbiculari et reniformi subobsoletis; posticæ albidæ, margine cinereo.

Graphiphora rhomboidea, *Steph. Ill. Brit. Ent. Haust.* ii. 128.
Graphiphora subrosea, *Steph. Ill. Brit. Ent. Haust. Append.* ii. 200, pl. 19, f. 1.
Noctua subrosea, *Guen. Noct.* i. 332, 555.
Cœnophila subrosea, *Steph. Cat. Brit. Lep.* 68.

a—c. England. Presented by F. Bond, Esq.
d—s. England. From Mr. Stephens' collection.
t, v. England. From Mr. Carter's collection.
u. England.

Group 5.

Alæ anticæ subquadratæ, rufescente-ferrugineæ, lineis transversis distinctis obscurioribus, orbiculari et reniformi pallidis bene determinatis. *Mas.*—Antennæ subciliatæ.

Fore wings subquadrate, reddish ferruginous, with distinct darker transverse lines; orbicular and reniform spots pale, distinctly marked, the former nearly round. *Male.*—Antennæ minutely ciliated.

18. Graphiphora punicea.

Roseo-rufa; abdomen pallidum; alæ anticæ lineis transversis pallidioribus et nigricantibus, litura costali, macula discali fasciaque lata exteriore nigricantibus; posticæ albidæ, ciliis cervinis.

Noctua punicea, *Hübn. Eur. Schmett. Noct.* pl. 1, f. 115. *Treit. Schmett. Eur.* vi. 1, 386. *God. Hist. Nat. Lép. Fr.* v. 206, pl. 63, f. 5. *Freyer, Beit. Ges. Eur. Schmett.* pl. 15, 46; *Ent. Zeit. Stett.* ii. 93. *Meig. Syst. Besch.* iii. 103, 39, pl. 99, f. 3. *Boisd. Icon. Lép. d'Eur.* pl. 83, f. 4; *Ind. Méth.* 105, 786. *Eversm. Faun. Volg-Ural.* 210. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 333, 557.

Diarsia punicea, *Hübn. Verz. Schmett.* 222, 2225.

North Europe.

19. Graphiphora Rubi.

Ferruginea; abdomen cinerascens; alæ anticæ annulis duobus lineisque transversis undulatis canis aut pallide ferrugineis fusco marginatis; posticæ cinereæ, ciliis pallidioribus.

Noctua Rubi, *View. T. V.* ii. 57, pl. 3, f. 5.

Noctua xanthographa, *Brahm. I. K.* ii. 112.

Noctua bella, *Bork. Eur. Schmett.* iv. 253, 605. *Treit. Schmett. Eur.* ii. 121; x. 35. *God. Hist. Nat. Lép. Fr.* ii. 199, pl. 63? *Frey. Neu. Beit. Schmett.* pl. 100. *Boisd. Icon. Lép. d'Eur.* pl. 83, f. 5; *Ind. Méth.* 105, 785. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* 1, 334, 558.

Noctua radica, *Esp. Schmett.* pl. 151, f. 4.

Noctua quadratum, *Hübn. Schmett. Eur. Noct.* pl. 101, f. 477.

Diarsia leucographa, *Hübn. Verz. Schmett.* 222, 2226.

Noctua punicea, *Haw. Lep. Brit.* 228.

Graphiphora punicea, *Steph. Ill. Brit. Ent. Haust.* ii. 135.
Graphiphora bella, *Westw. & H. Brit. Moths*, i. 132, pl. 26, f. 6.
Graphiphora Rubi, *Steph. Cat. Brit. Lep.* 71.

a—n. England. From Mr. Stephens' collection.
o—r. England.
s—w. Europe. From M. Becker's collection.

20. Graphiphora umbrosa.

Cervina; abdomen pallide testaceum; alæ anticæ annulis duobus discalibus, lineis quatuor transversis undulatis fasciaque exteriore fuscis; posticæ subtestaceæ, margine lato cinereo.

Noctua umbrosa, *Hübn. Eur. Schmett. Noct.* pl. 97, f. 456, 457. *Treit. Schmett. Eur.* ii. 128. *God. Hist. Nat. Lép. Fr.* ii. 201, pl. 63. *Boisd. Ind. Méth.* 105, 787. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 334, 559.
Noctua sexstrigata, *Haw. Lep. Brit.* 228, 198.
Lytæa umbrosa, *Steph. Ill. Brit. Ent. Haust.* ii. 108. *Westw. and H. Brit. Moths*, i. 110, pl. 22, f. 1.
Scotia umbrosa, *Hübn. Verz. Schmett.* 226, 2268.

a. England. From Mr. Haworth's collection.
b—l. England. From Mr. Stephens' collection.
m—p. England.

Group 6.

Palpi ascendentes. Alæ anticæ margine exteriore subundulato. *Mas.*—Antennæ simplices.

Palpi ascending. Fore wings indistinctly undulating along the exterior border. *Male.*—Antennæ simple.

21. Graphiphora Baja.

Ferruginosa, cinereo conspersa; abdomen cinerascens; alæ anticæ lineis transversis undulatis, orbiculari et reniformi saturatioribus, his testaceo marginatis, orbiculari magna, macula costali subapicali nigra; posticæ cinereæ.

——— ———, *Engr. Pap. d'Eur.* 540, a, b.
Phalæna-Noctua Baja, *Gmel. ed. Syst. Nat.* i. 5, 2579, 1191.
Noctua Baja, *Wien. Verz.* 77, 3. *Fabr. Mant. Ins.* ii. 175, 264; *Ent. Syst.* iii. 2, 109, 329. *Bork. Eur. Schmett.* iv. 530, 213. *Hübn. Eur. Schmett. Noct.* pl. 25, f. 119. *Haw. Lep. Brit.*

188. *Freyer, Alt. Beitr.* pl. 74, 89; *Ent. Zeit. Stett.* ii. 93, *Meig. Syst. Besch.* iii. 97, 28, pl. 94, f. 9. *Treit. Schmett. Eur.* v. 215, 4. *God. Hist. Nat. Lép. Fr.* ii. 203 pl. 63, f. 4. *Boisd. Ind. Méth.* 106, 795. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 335, 562.

Amathes baja, *Hübn. Verz. Schmett.* 222, 2220.

Graphiphora baja, *Steph. Ill. Brit. Ent. Haust.* ii. 134. *Westw. and H. Brit. Moths*, i. 130, pl. 25, f. 8, 9.

Var. Noctua tricomma, *Esp. Schmett.* iv. pl. 167, f. 6.

e—v. England. From Mr. Stephens' collection.

w—y. England.

z—ee. Europe. From M. Becker's collection.

ff—kk. Trenton Falls, New York. Presented by E. Doubleday, Esq.

ll. ——?

mm, nn. Orilla, West Canada. From Mr. Bush's collection.

oo. Rio Janeiro. From Mr. Stevens' collectien.

22. Graphiphora sobrina.

Rubro-cinerea; caput, palpi et thorax anticus rubra; abdomen testaceum; alæ anticæ apud costam subcanescentes, lineis transversis subobsoletis fuscescentibus, guttis punctisque nonnullis nigricantibus; posticæ cinereæ, ciliis sordide albidis ex parte rufescente interlineatis.

Noctua sobrina, *Boisd. Ind. Méth.* 105, 782. *Eversm. Faun. Volg-Ural.* 210. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 224, pl. 69, f. 5, a. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 335. 563.

Orthosia sobrina, *Herr.-Schæff. Eur. Schmett.* ii. *Noct.* pl. 26, f. 127, 129. *Steph. Cat. Brit. Lep.* 77.

Orthosia Gruneri, *Pierret. Dup. Hist. Nat. Lép. Fr. Suppl.* pl. 69, f. 5, 6. *Herr.-Schæff. Eur. Schmett.* ii. 196, 42.

a, b. Europe. From M. Becker's collection.

Group 7.

Color cinereus. Alæ anticæ longiusculæ, lituris subobsoletis. *Mas.*—Antennæ subserratæ.

Colour cinereous. Fore wings somewhat longer than in the other groups; the usual marks nearly obsolete. *Male.*—Antennæ minutely serrated.

23. Graphiphora neglecta.

Cervino-cinerea; alæ anticæ gutta discali nigricante; posticæ cinereo-fuscæ, ciliis pallidioribus.

Noctua neglecta, *Hübn. Eur. Schmett. Noct.* pl. 34, f. 160. *Haw Lep. Brit.* 123. *Guen. Ann. Soc. Ent. Fr.* vi.; *Noct.* i. 336, 564.

Segetia neglecta, *Steph. Ill. Brit. Ent. Haust.* ii. 154, pl. 21, f. 2.

Orthosia neglecta, *Boisd. Ind. Méth.* 140, 1127. *Frey. Neu. Beit. Schmett.* ii. pl. 136. *Steph. Cat. Brit. Lep.* 77.

Noctua lævis, *Haw. Lep. Brit.* 130. *Steph. Ill. Brit. Ent. Haust.* ii. 157.

Caradrina neglecta, *Hübn. Verz. Schmett.* 230, 2307.

a—h. England. From Mr. Stephens' collection.
i, k. England. From Mr. Carter's collection.
l. ——— ? From Mr. Milne's collection.

24. Graphiphora cerasina.

Rubra; abdomen cinereum; alæ anticæ maculatum marginibus et lineis transversis undulatis nigricantibus; posticæ nigro-cinereæ, basi ciliisque pallidioribus.

Noctua cerasina, *Frey. Neu. Beit. Schmett.* iv. pl. 312. *Herr.-Schæff. Schmett. Eur.* ii. pl. 27, f. 131—133. *Guen. Noct.* i. 336, 565.

Borders of the Danube.

North America.

Group 1.

Like the second European group.

25. Graphiphora lubricans.

Cinerea; thorax antice nigro fasciatus; abdomen testaceum; alæ anticæ ferrugineæ, costa cinerea nigro maculata, claviformi et orbiculari obsoletis, reniformi nigra cinereo interlineata; posticæ sordide albidæ.

Noctua lubricans, *Guen. Noct.* i. 323, 531.

a. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

26. Graphiphora expansa.

Mas. *Ferrugineo-rufa; antennæ serratæ; abdomen pallidum, basi cinereum; alæ anticæ purpurascente tinctæ, fasciis quatuor undulatis nigris, 2a 3aque antice dilatatis, 4a apud costam dilatata guttas tres rufescentes includente; posticæ cinereæ, gutta discali margineque latissimo nigricantibus.*

Male. Ferruginous-red. Antennæ serrated. Abdomen paler red, cinereous towards the base. Fore wings with a slight purplish bloom, and with four distinct undulating black bands, of which the second and the third are dilated in front of the middle, and the fourth by the costa, and there contains three reddish dots. Hind wings cinereous, with a blackish discal dot, and a very broad blackish border. Length of the body 7½ lines; of the wings 16 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

27. Graphiphora jucunda.

Fœm. *Læte rufa; thorax testaceo fasciatus; abdomen pallide cinereum; alæ anticæ lituris costalibus testaceis nigrisque, linea transversa submarginali guttulari testacea, gutta basali testacea, striga discali nigra, orbiculari albido marginata, reniformi albida rufo interlineata, guttis marginalibus unaque postica interiore nigris; posticæ pallide cinereæ, macula discali fasciaque submarginali obscurioribus.*

Female. Rather bright red. Thorax with testaceous bands. Abdomen pale cinereous. Fore wings with some minute testaceous and black marks along the costa, and with a dotted testaceous transverse submarginal line; the other transverse lines almost obsolete; a testaceous dot between the base and a black discal streak, which is interrupted by the orbicular spot and extends to the reniform; a black dot behind the orbicular spot, which is large, round, and has a whitish border; reniform whitish, interlined with red; a row of black marginal dots. Hind wings pale cinereous; discal spot and submarginal band darker cinereous. Length of the body 6 lines; of the wings 14 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

28. GRAPHIPHORA SIGMOIDES.

Pallide cervina; thoracis latera ferruginea, nigro vittata; alæ anticæ ferrugineæ, lineis transversis undulatis maculaque subapicali testaceis, vitta discali interrupta et abbreviata nigra orbicularem subovatam includente; posticæ pallide cinereæ.

Var. *Cinerea; abdomen pallidum; alæ anticæ nigro conspersæ, lineis transversis indistinctis, fascia submarginali pallida, lituris costalibus nigris, orbiculari et reniformi nigro marginatis, illa subrotunda sat magna; posticæ albidæ.*

Noctua sigmoides, *Guen. Noct.* i. 325, 539.

a—h. Trenton Falls, New York. Presented by E. Doubleday, Esq.

Group 2.

Like the third European group.

29. GRAPHIPHORA BICARNEA.

Ferrugineo-picea; thorax cervino fasciatus; abdomen testaceum; alæ anticæ plaga basali maculaque costali exteriore cervinis, vitta discali interrupta maculaque subapicali nigris, orbiculari et reniformi pallide piceis, illa ovata; posticæ cinerascentes, ciliis pallidis.

Noctua bicarnea, *Guén. Noct.* i. 329, 546.

a—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.

Group 3.

Like the fourth European group.

30. GRAPHIPHORA ELIMATA.

Cinerascens; thorax antice et abdomen cervina; alæ anticæ lineis transversis undulatis maculisque discalibus pallide cinereis, lituris costalibus strigaque discali fuscis, orbiculari ovata sat magna; posticæ cinereo-fuscæ.

Noctua elimata, *Guen. Noct.* i. 333, 556.

a. Georgia. Presented by E. Doubleday, Esq.

South America.

Group 1.

Like the sixth European group.

31. Graphiphora major.

Rufo-ferruginea; palpi ascendentes, articulo 2o cylindrico longiusculo; abdomen testaceo-cinerascens; alæ anticæ violaceo nigricante tinctæ, macula reniformi testaceo marginata et signata, margine exteriore subundulato; posticæ cervino-cinereæ.

Noctua major, *Guen. Noct.* i. 334, 560.

a, b. Rio Janeiro. From Mr. Stevens' collection.

32. Graphiphora albirena.

Fœm. G. majori *valde affinis, minor; alæ angustiores; anticæ apice plus acutæ; macula reniformis maxima, informis, alba, umbra nigricante marginata, linea subterminali e punctis flavescentibus.*

Noctua albirena, *Guen. Noct.* i. 335, 561.

Brazil.

33. Graphiphora maja.

Mas. *Ferrugineo-fusca; abdomen cinereum, apice cervinum; alæ anticæ cinereo subtinctæ, lineis transversis obscure fuscis indistinctis undulatis, macula subcostali nigra, lituris costalibus et submarginalibus albidis, guttis submarginalibus nigris, orbiculari et reniformi albido marginatis, hac fusco notata; posticæ fusco-cinereæ, ciliis testaceis.*

Noctua maja, *MSS.*

Male. Ferruginous-brown. Abdomen cinereous, fawn-colour at the tip. Fore wings with a slight cinereous tinge; transverse lines dark brown, indistinct, undulating; the exterior one with a black spot near the costa; some minute whitish marks along the costa, and on the submarginal black dots; orbicular and reniform spots with whitish outlines, the former more or less indistinct, the latter partly including a diffuse indistinct dark brown spot. Hind wings brownish cinereous, with testaceous ciliæ. Length of the body 8 lines; of the wings 18 lines.

Brazil. In Mr. Saunders' collection.

Africa.

34. Graphiphora? excisa.

Albida; alæ anticæ lineis transversis cinereis, fascia exteriore fusca, guttis marginalibus nigris, litura discali atra furcata; posticæ margine cinerea.

Noctua excisa, *Herr.-Schæff. Lep. Exot. Sp. Nov.* f. 129.

Cape.

35. Graphiphora informis.

Mas. *Ferrugineo-fusca; antennæ albidæ, subpectinatæ; abdomen pallidum; alæ anticæ breviusculæ nigro conspersæ, lineis transversis undulatis, lituris costalibus strigisque exterioribus nigricantibus, lunulis marginalibus nigris, macula orbiculari longi-ovata, reniformi vix excavata claviformi longissima per angusta; posticæ cinereo-fuscæ.*

Ferruginous-brown. Antennæ whitish, slightly pectinated. Abdomen much paler than the thorax. Fore wings rather short, speckled with black, with the usual transverse undulating blackish lines, with blackish marks along the costa, with black marginal lunules, and with an exterior row of blackish streaks; orbicular spot elongate-oval, less than half the size of the reniform, which is hardly excavated; claviform very long and narrow. Hind wings cinereous-brown. Length of the body 6 lines; of the wings 14 lines.

a. Interior of South Africa. Presented by the late Earl of Derby.

36. Graphiphora immitis.

Cinereo-fusca; thorax antice obscurior; alæ anticæ lineis transversis undulatis pallidioribus et obscurioribus, lituris costalibus testaceis; claviformi et orbiculari obsoletis, reniformi nigro-fusco marginata extus valde excavata; posticæ vix pallidiores.

Cinereous-brown. Thorax dark brown in front. Fore wings with indistinct transverse undulating paler and darker lines; some testaceous marks along the costa, the largest one opposite the reniform spot, which is bordered with blackish brown, and is much excavated on its outer side; claviform and reniform spots obsolete. Hind wings hardly paler than the fore wings. Length of the body 6 lines; of the wings 14 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

37. GRAPHIPHORA ABSORBENS.

Mas et fœm. *Testacea; antennæ* maris *vix ciliatæ; alæ anticæ fusco conspersæ punctisque fuscis subobsolete fasciatæ, apud costam subrectæ, apice angulatæ, margine exteriore perparum obliquo, orbiculari et reniformi subrotundis nigricantibus; posticæ macula indistincta discali fusca.*

Male and female. Testaceous. Thorax and wings minutely speckled with brown. Fore wings with the speckles here and there more frequent, and forming indistinct bands; costa nearly straight; tips angular; exterior border very slightly oblique; orbicular and reniform marks forming two nearly round blackish spots, the former much smaller than the latter. Hind wings with an indistinct brown discal spot. *Male.*—Antennæ very minutely ciliated. Length of the body 6 lines; of the wings 14 lines.

a, b. South Africa. Presented by Dr. A. Smith.

Asia.

38. GRAPHIPHORA EMINENS.

Schistaceo-cinerea; alæ anticæ lineis transversis nigris remotis duplicatis, strigis discalibus nigricantibus, orbiculari et reniformi conspicuis pallido marginatis illa obliqua subelliptica; posticæ albæ.

Graphiphora eminens, *Lederer, Verhandl. Zool. Botan. Verein. in Wien.* v. 106, pl. 1, f. 5.

Altai, Siberia.

Australia.

39. GRAPHIPHORA RECLUSA.

Cervina, subtus alba; caput antice album; thorax ex parte albo hirtus; abdomen pallide cinereum; alæ anticæ pallidissime cervinæ, lituris costalibus nigris, fascia diffusa submarginali maculaque postica nigricantibus, orbiculari nigricante pupillata annulo cervino inclusa, reniformi nigricante vix excavata, lunulis marginalibus nigris; posticæ albæ, litura discali margineque fuscis.

Fawn-colour, mostly white beneath. Head white in front. Thorax partly clothed with white hairs. Abdomen pale cinereous. Fore wings very pale fawn-colour, with some black marks along the costa, and with a blackish diffuse submarginal band, which is obsolete hindward; a blackish spot behind the orbicular one, which has

a blackish centre, and is enclosed in a fawn-coloured ringlet; reniform blackish, hardly excavated; a row of black marginal lunules. Hind wings whitish, with a brown discal mark and a brown border, which are darker and more clearly defined beneath. Length of the body 7 lines; of the wings 16 lines.

a, b. Australia.

40. Graphiphora instipata.

Mas et fœm. *Cinerea; palpi articulo 3o minimo; antennæ simplices; thorax fusco conspersus; abdomen pallidum; alæ anticæ lineis transversis nigricantibus duplicatis et undulatis, orbiculari parva alba subrotunda nigro marginata, reniformi nigra albo notata; posticæ cinereæ, ciliis albidis.*

Male. Cinereous. Third joint of the palpi very minute. Antennæ simple. Thorax and fore wings minutely speckled with brown. Abdomen paler. Fore wings with the transverse lines blackish, double and undulating; orbicular spot small, white, nearly round, bordered with black; reniform black, marked with white. Hind wings cinereous, with whitish ciliæ. Length of the body 6 lines; of the wings 14 lines.

a. Tasmania. Presented by R. Butler, Esq.
b, c. Australia.

41. Graphiphora compta.

Mas. *Purpurascente-rufa, palpi apice albidi; abdomen cinereum, apice rufescens; alæ anticæ lineis transversis obscurioribus indistinctis, exteriore testacea, marginali undulata fusca, costali pallida; maculis orbiculari et reniformi distinctis, gutta postica interiore nigricante, margine exteriore interrupte fusco; posticæ obscure cinereæ, ciliis pallide rufescentibus.*

Male. Red, with an indistinct purplish tinge. Palpi whitish towards the tips. Abdomen cinereous, reddish towards the tips. Fore wings with a pale costal line; transverse lines darker and indistinct, excepting the testaceous exterior line and the brown undulating marginal one; spots paler along the brown borders, which are incomplete; a blackish dot behind the orbicular spot, which is round and rather large; reniform of the usual shape. Hind wings dark cinereous, with pale reddish ciliæ. Length of the body 7 lines; of the wings 16 lines.

a. New South Wales. From Mr. Wood's collection.

New Zealand.

42. Graphiphoga implexa.

Fum. *Nigro-cinerea, subtus cinerea; palpi albidi; abdomen cinereum; alæ anticæ marginem exteriorem versus pallidiores, lineis atris transversis undulatis, exteriore strigisque marginalibus connexis, orbiculari et reniformi testaceis, illa rotunda minima atro marginata, hac e striga arcuata albida ex parte occulta; posticæ fusco-cinereæ.*

Female. Cinereous-black, cinereous beneath. Palpi whitish. Abdomen cinereous. Fore wings with deep black transverse undulating lines, of which the exterior one is connected with a row of deep black streaks; claviform mark obsolete; orbicular and reniform testaceous, the former round, very small, bordered with deep black, the latter partly concealed by a curved whitish streak; space between the exterior border and the exterior line somewhat paler than the wing elsewhere. Hind wings brownish-cinereous. Length of the body 6 lines; of the wings 14 lines.

a, *b*. New Zealand. Presented by the Rev. W. Colonso.
c. New Zealand. Presented by Lieut. Smith.

Country unknown.

43. Graphiphora intermixta.

G. neglectæ *affinis; alæ anticæ fusco-cinereæ, plus quadratæ, basi discoque violaceo-cinereis, linea subterminali flavescente, maculis magnis, reniformi distincta flava cinereo et nigricante notata.*

Noctua intermixta, *Guen. Noct.* i. 337, 566.

44. Graphiphora subdolens.

Mas. *Ferruginea; antennæ serratæ; abdomen fusco-cinereum; alæ anticæ fasciis indistinctis diffusis undulatis nigricantibus, maculis pallidioribus subobsoletis; posticæ fusco-cinereæ.*

Male. Ferruginous. Antennæ serrated. Abdomen brownish cinereous. Fore wings with indistinct somewhat diffuse blackish undulating bands; spots nearly obsolete, but apparently of the usual form, and somewhat paler than the rest of the wing. Hind wings brownish cinereous. Length of the body 8 lines; of the wings 18 lines.

a. ———?

Genus 12. OCHROPLEURA.

Corpus robustum. Proboscis mediocriter longa. Palpi valde ascendentes; articulus 3us brevissimus, conicus. Antennæ corpore dimidio valde longiores. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ pallidæ, apice subrotundato, margine exteriore subconvexo perparum obliquo. *Mas.*—Antennæ subciliatæ.

Ochropleura, *Hübn. Verz. Schmett.* 223.
Ogygia, p., *Hübn. Verz. Schmett.*
Megasema, p., *Hübn. Verz. Schmett.*
Noctua, p., *Treit.; Guen. Noct.* i. 328.
Chersotis, p., *Boisd.*
Graphiphora, p., *Steph.*

Body stout. Proboscis moderately long. Palpi stout, ascending above the vertex; third joint minute, conical, not one-fourth of the length of the second. Antennæ much more or very much more than half the length of the body. Abdomen extending hardly or as much as one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings pale and straight in front, somewhat rounded at the tips, slightly convex, and very slightly oblique along the exterior border. *Male.*—Antennæ minutely ciliated.

1. Ochropleura plecta.

Rubra; caput, thoracis fascia costaque pallide testacea; thorax linea transversa antica nigra; abdomen testaceum; alæ anticæ vitta discali punctisque marginalibus nigris, ocellis duobus discalibus cinereis albo cinctis, lineis duabus transversis nigricantibus, fascia exteriore testacea; posticæ albidæ, ciliis testaceis.

——— ———, *Engr. Pap. d'Eur.* 419, a—f.
Phalæna-Noctua plecta, *Linn. Syst. Nat.* 2851, 157; *Faun. Suec.* 1216. *Gmel. ed. Syst. Nat.* i. 5, 2542.
Noctua plecta, *Wien. Verz.* 77, 6. *Fabr. Sp. Ins.* ii. 224, 8; *Mant. Ins.* ii. 154, 139; *Ent. Syst.* iii. 1, 65, 182. *Klöem, Beit. Ins. Gesch.* i. pl. 23. *Esp. Schmett.* iv. pl. 143, f. 4, 5. *Bork. Eur. Schmett.* iv. 478, 190. *Sepp, Ins.* iv. pl. 28.

Hübn. Eur. Schmett. Noct. pl. 25, f. 117. *Haw. Lep. Brit.* 193. *Treit. Schmett.* v. 248, 18. *God. Hist. Nat. Lép. Fr.* v. *Meig. Handb.* 156, 21; *Syst. Besch.* iii. 103, 38, pl. 93, f. 1. *Guen. Noct.* i. 326, 540.

Ochropleura plecta, *Hübn. Verz. Schmett.* 223, 2233.

Chersotis plecta, *Boisd. Ind. Méth.* 104, 772.

Graphiphora plecta, *Steph. Ill. Brit. Ent. Haust.* ii. 136. *Westw. and H. Brit. Moths*, i. 133, pl. 26, f. 7, 8.

a—i. England. From Mr. Stephens' collection.
j—m. England.
n—q. Europe. From M. Becker's collection.
r. Sicily. From Mr. Melly's collection.
s. Trenton Falls, New York. Presented by E. Doubleday, Esq.
t, v. Nova Scotia. From Lieut. Redman's collection.

2. Ochropleura leucogaster.

Pallide testacea; thorax fasciis duabus nigricantibus; alæ anticæ cinereo-rubidæ, costa lata pallide testacea, vitta discali nigra ocellis duobus albidis interrupta, punctis exterioribus fuscescentibus, guttis marginalibus nigris albido marginatis.

Noctua leucogaster, *Frey. Neu. Beit. Schmett.* i. 38, pl. 21. *Treit. Schmett. Eur. Suppl.* x. 37. *Boisd. Icon. Lép. d'Eur.* pl. 83. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 222, pl. 20. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 327, 541. *Herr.-Schæff. Schmett. Eur.* i. 327, 541.

Chersotis leucogaster, *Boisd. Ind. Méth.* 104, 773.

South France. Dalmatia. Sicily.

3. Ochropleura musiva.

Ferruginea; thorax fascia antica lata nigro-fusca albido marginata; abdomen testaceo-cinerascens; alæ anticæ vitta costali et macula orbiculari connexis albidis, striga discali interrupta atra, reniformi albido marginata; posticæ albæ, margine tenui cinereo.

Noctua musiva, *Hübn. Eur. Schmett. Noct.* pl. 25, f. 118. *Treit. Schmett. Eur.* v. 247, 17. *Dup. Hist. Nat. Lép. Fr.* ii. 212, pl. 64. *Meig. Syst. Besch.* iii. 102, 36, pl. 112, f. 8. *Eversm. Faun. Volg-Ural.* 213. *Boisd. Ind. Méth.* 774. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 327, 543.

Graphiphora musiva, *Steph. Ill. Brit. Ent. Haust.* iii. 136.
Ochropleura musiva, *Hübn. Verz. Schmett.* 223, 2232.
Chersotis musiva, *Boisd. Ind. Méth.* 104, 774.

a—d. Europe. From M. Becker's collection.

4. Ochropleura flammatra.

Fuscescens; thorax fascia antica lata atra; abdomen cinerascens; alæ anticæ lineis transversis undulatis nigro-fuscis, striga basali informi atra, costa, orbiculari et reniformi canescentibus; posticæ cinereæ.

——— ———, *De Vill. Lin. Ent.* 346, f. 20.
Phalæna-Noctua flammatra, *Gmel. ed. Syst. Nat.* i. 5, 2543, 1034.
Noctua flammatra, *Wien. Verz.* 80, 1. *Fabr. Mant. Ins.* ii. 155, 147; *Ent. Syst.* iii. 2, 67, 190. *Bork. Eur. Schmett.* iv. 545, 220. *Hübn. Eur. Schmett. Noct.* pl. 26, f. 124. *Treit. Schmett. Eur.* v. 245, 16. *God. Hist. Nat. Lép. Fr.* ii. 169, pl. 60, f. 4. *Meig. Syst. Besch.* iii. 102, 36, pl. 92. *Boisd. Ind. Méth.* 104, 776. *Guen. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 327, 544.
Ogygia flammatra, *Hübn. Verz. Schmett.* 225, 2252.

South Europe. Brazil.

a, b. Europe. From M. Becker's collection.
d, e. North India. Presented by General Hearsay.
f. North India. Presented by E. Doubleday, Esq.

North America.

5. Ochropleura ochrogaster.

O. plectæ *affinis, paullo major; thorax antice et abdomen ochraceo-alba; alæ anticæ rufæ, pallidiores, linea subterminali e nebula nigricante, punctis marginalibus rotundatis non approximatis, ciliis interlineatis, maculis majoribus, reniformi minus arctata; vena mediana alba; posticæ guttis marginalibus.*

Noctua ochrogaster, *Guen. Noct.* i. 327, 542.

North America.

West Indies.

6. Ochropleura?? Apronia.

Fusca; alæ luteo ciliatæ; anticæ purpurascentes cinereæ lineis transversis fuscis, plagis guttisque nigris, extus fuscæ.

Phalæna-Noctua Apronia, *Cram. Pap. Exot.* iv. 222, pl. 396, f. E.
Megasema Apronia, *Hübn. Verz. Schmett.* 222, 2228.

Barbice.

7. Ochropleura vicaria.

Fœm. *Rufescens, vertice, thoracis fascia abdomineque albido-testaceis; alæ anticæ costa albido-testacea, striga basali subinterrupta nigra orbicularem parvam subrotundam includente, reniformi distincta, lineis transversis indistinctis, guttis marginalibus nigris; posticæ albæ.*

Female. Reddish. Vertex whitish testaceous, Thorax with a band of the same hue, and with some brown hairs in front. Abdomen whitish testaceous. Fore wings whitish testaceous along three-fourths of the length of the costa, with a black slightly interrupted basal stripe, which includes the orbicular spot, and extends as far as the reniform; orbicular nearly round, rather small; reniform of the usual shape; transverse lines indistinct; a row of black marginal dots. Hind wings white. Length of the body 5 lines; of the wings 12 lines.

a. South Africa. Presented by Dr. A. Smith.

Australia.

8. Ochropleura tortisigna.

Cervina; thorax posticus fuscus; alæ anticæ ferrugineæ, nigricante suffusæ, venis nigricantibus, plagis duabus elongatis discalibus, striga longa discali nigro-fusca extus dilatata, orbicularem et reniformem albas includente, orbiculari ovata perparva, reniformi e linea contorta, costa albida; posticæ pallide testaceæ, marginibus latis fuscis.

Nearly allied to *O. plecta*. Head and fore part of the thorax fawn-colour. Thorax brown hindward. Fore wings ferruginous, with a blackish tinge; two large fusiform marks in the disk; veins blackish; a long blackish brown streak in the disk, widening outwards and containing the orbicular and reniform spots, which

are white; orbicular oval, very small; reniform consisting of a contorted line; costa whitish. Hind wings pale testaceous, with broad brown borders. Length of the body 5 lines; of the wings 12 lines.

a. Tasmania. Presented by Morton Allport, Esq.

Genus 13. SEGETIA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, porrecti, caput vix superantes; articulus 2us 3o quadruplo longior. Antennæ corporis dimidio valde longiores. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore vix obliquo. *Mas.*—Antennæ crenulatæ, subciliatæ.

Segetia, *Steph. Ill. Brit. Ent. Haust.* ii. 153.
Sideridis, p., *Hübn. Verz. Schmett.* 232.
Noctua, p., *Treit.; Dup.; Boisd.; Guen.*

Body stout. Proboscis moderately long. Palpi stout, pilose, porrect, not prominent; third joint less than one-fourth of the length of the second. Antennæ very much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four long spurs, moderately broad. Fore wings straight in front, somewhat rounded at the tips, hardly oblique along the exterior border. *Male.*—Antennæ crenulate, minutely ciliated.

1. Segetia xanthographa.

Cervina; abdomen cinerascens; alæ anticæ lineis transversis guttularibus indistinctis, orbiculari et reniformi testaceo marginatis non bene determinatis; posticæ albidæ cinereo marginatæ (mas) *aut cinereæ* (fœm.)

Var. *Alæ anticæ maculis totis testaceis.*

Noctua xanthographa, *Wien. Verz.* 83, 20. *Hübn. Eur. Schmett.* 138. *Treit. Schmett. Eur.* v. 196. *Dup. Hist. Nat. Lép. Fr.* iii. 107, pl. 80, f. 2. *Frey. Neu. Beit. Schmett.* iii. pl. 250. *Boisd. Ind. Méth.* 101, 753. *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 337, 567.

Segetia xanthographa, *Steph. Ill. Brit. Ent. Haust.* ii. 153. *Westw. & H. Brit. Moths*, i. 143, pl. 29, f. 9.

Noctua tetragona, *Haw. Lep. Brit.* 124.
Sideridis xanthographa, *Hübn. Verz. Schmett.* 232, 2328.

b—e. England. From Mr. Stephens' collection.
f—y. England.
z—cc. Europe. From M. Becker's collection.

Fam. 6. ORTHOSIDÆ.

Corpus robustum aut validum. Proboscis mediocriter longa aut brevis. Palpi subrecti, sæpissime breves et porrecti, raro ascendentes; articulus 3us brevis, conspicuus. Antennæ ciliatæ, rarissime nudæ, *maris* nonnunquam serratæ aut subpectinatæ. Thorax raro cristatus. Abdomen sæpissime glabrum. Pedes mediocres, raro spinosi. Alæ anticæ coloribus variis, posticas obtegentes, linea submarginali sæpissime recta.

Orthosidæ, *Guen. Ann. Soc. Ent. Fr.* vi. 224; *Noct.* i. 338.

Body robust or rather stout. Proboscis short or moderately long. Palpi almost straight, generally short and porrect, rarely ascending; third joint short, distinct. Antennæ ciliated, very rarely bare, occasionally serrated or slightly pectinated in the male. Thorax rarely crested. Abdomen very generally smooth. Legs moderately long, rarely spinose. Fore wings with various colours, entirely covering the hind wings in repose; submarginal transverse line very generally straight.

A. Tibiæ posticæ non dense fasciculatæ.
A. Alæ anticæ margine exteriore non angulato.
A. Thorax non lanuginosus.
a. Alæ anticæ margine exteriore non denticulato.
i. Tibiæ posticæ calcaribus parvis.
* Abdomen lateribus pilosissimis.
10. HYPOTRIX, *Guen.*
** Abdomen lateribus non pilosissimis.
† Alæ anticæ margine exteriore non undulato.
‡ Thorax non cristatus.
§ Palpi brevissimi. - 1. PANOLIS, *Hübn.*
§§ Palpi non brevissimi.
× Alæ anticæ mediocriter latæ.
6. SEMIOPHORA, *Steph.*
×× Alæ anticæ latiusculæ.
19. MESOGONA, *Boisd.*

‡‡ Thorax cristatus.
§ Caput non conicum.
14. DASYCAMPA, *Guen.*
§§ Caput antice conicum.
15. HOPORINA, *Boisd.*
†† Alæ anticæ margine exteriore undulato.
‡ Palpi caput sat superantes.
16. XANTHIA, *Ochs.*
‡‡ Palpi caput vix superantes.
18. CIRRŒDIA, *Guen.*
ii. Tibiæ posticæ calcaribus longis.
* Antennæ omnino nudæ. - 2. EOGENA, *Guen.*
** Antennæ non omnino nudæ.
† Palporum articulus 2us 3o triplo longior.
‡ Abdomen alas posticas vix superans.
3. PACHNOBIA, *Guen.*
‡‡ Abdomen alas posticas sat superans.
11. ORTHODES, *Guen.*
†† Palporum articulus 3us minutus aut minimus.
‡ Alæ anticæ non falcatæ.
§ Alæ anticæ margine exteriore valde undulato. - - 24. DABARITA, *Walk.*
§§ Alæ anticæ margine exteriore convexo.
× Antennæ *maris* subciliatæ.
4. CERAMICA, *Guen.*
×× Antennæ *maris* subpectinatæ.
17. XESTIA, *Hübn.*
§§§ Alæ anticæ margine exteriore non convexo.
× Antennæ *maris* plus minusve pectinatæ. - 7. TÆNIOCAMPA, *Guen.*
×× Antennæ *maris* non pectinatæ.
= Palpi caput vix superantes.
8. ORTHOSIA, *Ochs.*
= = Palpi caput non superantes.
+ Alæ anticæ sat longæ.
9. ANCHOSCELIS, *Guen.*
++ Alæ anticæ breviusculæ.
12. CERASTIS, *Ochs.*
b. Alæ anticæ margine exteriore denticulato.
13. EUPSILIA, *Hübn.*
B. Thorax lanuginosus. - - - 5. HYSSIA, *Guen.*
B. Alæ anticæ margine exteriore angulato.
A. Tibiæ posticæ calcaribus longis.

a. Antennæ *maris* simplices. - - 20. CAREA, *Walk.*
b. Antennæ *maris* pectinatæ. - 21. EPISPARIS, *Walk.*
B. Tibiæ posticæ calcaribus longissimis. 22. AMARNA, *Walk.*
B. Tibiæ posticæ dense fasciculatæ. - 23. EPITAUSA, *Walk.*

Genus 1. PANOLIS.

Corpus robustum. Caput brevissimum. Proboscis mediocriter longa. Palpi brevissimi. Antennæ filiformes, corporis dimidio multo longiores. Abdomen alas posticas perpaullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus parvis. Alæ sat angustæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore sat obliquo. *Mas.*—Antennæ vix crenulatæ.

Panolis, *Hübn. Verz. Schmett.* 214; *Steph. Cat. Brit. Lep.*
Trachea, *Ochs. Syst. Gloss. Schmett. von Eur.* iv.; *Treits.*; *Boisd.*; *Guen. Ann. Soc. Ent. Fr.* viii. 475; *Noct.* i. 339; *Herr.-Schæff.*
Achatia, *Curt.*; *Steph.*
Ilarus, *Boisd.*
Xylina, p., *Meig.*

Body stout. Head very short. Proboscis moderately long. Palpi very short. Antennæ filiform, very much more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs stout, pilose; hind tibiæ with four short spurs. Wings rather narrow. Fore wings straight in front, somewhat rounded at the tips, rather oblique along the exterior border. *Male.*—Antennæ hardly crenulate.

1. PANOLIS PINIPERDA.

Rufo-cervina; thorax albo varius; abdomen cinereum; alæ anticæ venis, macula, annulo, fascia exteriore obliqua ciliisque apud venas albis; posticæ cinereæ, ciliis albis.

Bombyx spreta, *Fabr. Mant. Ins.* ii. 124, 139; *Ent. Syst.* iii. 1, 455, 151.
——— ———, *Engr. Pap. d'Eur.* 489, a—f. *Schæff. Icon.* ii. pl. 154.
Noctua piniperda, *Loschge, Naturf.* xxi. 27, pl. 11. *Sepp, Ins.* iii. pl. 34. *Esp. Schmett.* iv. pl. 125, f. 1—6. *Bork. Eur. Schmett.* iv. 443, 178.
Trachea piniperda, *Treit. Schmett. Eur.* v. 76, 4. *Dup. Hist. Nat. Lép. Fr.* vi. 436, pl. 100, f. 2, 3. *Ratz. Forst. Ins.* ii. 170, pl. 10. *Boisd. Ind. Méth.* 142, 1153. *Guen. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 340, 568. *Herr.-Schæff. Eur. Schmett.* ii. 191, 32. *Stainton, Manual*, 240.

Noctua flammea, *Wien. Verz.* 87, 3. *Fabr. Mant. Ins.* ii. 164, 198; *Ent. Syst.* iii. 2, 85, 248. *Hübn. Eur. Schmett. Noct.* pl. 101, f. 476.
Phalæna-Noctua flamma, *Gmel. ed. Syst. Nat.* i. 5, 2568, 1150.
Phalæna-Noctua spreta, *Gmel. ed. Syst. Nat.* i. 5, 2435, 567.
Phalæna piniperda, *Kob. et Panz. Baumt. Nadeln*, 51, pl. 1, f. 1—12.
Noctua ochroleuca, *Hübn. Eur. Schmett. Noct.* pl. 19, f. 91.
Xylina piniperda, *Meig. Handb.* 165, 42; 42; *Syst. Besch.* iii. 186, 11, pl. 110, f. 4.
Noctua telifera, *Payk. Act. Holm.* xlviii. 58, pl. 2, f. 2, 3.
Panolis piniperda, *Steph. Cat. Brit. Lep.* 74.
Phalæna-Noctua Pini, *Vill. Ent.* ii. 278.
Achatia piniperda, *Curt. Brit. Ent.* iii. pl. 117. *Steph. Ill Brit. Ent. Haust.* iii. 19.
Panolis flammea, *Hübn. Verz. Schmett.* 214, 2134.
a—l. England. From Mr. Stephens' collection.
m—r. England.
s—æ. Europe. From M. Becker's collection.

Genus 2. EOGENA.

Corpus validum. Proboscis brevis. Palpi graciles, breves, caput non superantes. Antennæ simplices, setaceæ, omnino nudæ. Abdomen alas posticas paullo superans. Pedes sat validi; tibiæ posticæ calcaribus longis. Alæ latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore vix obliquo.

Eogena, *Guen. Noct.* i. 341.

Body stout. Proboscis short. Palpi slender, short, not extending beyond the head. Antennæ simple, testaceous, quite bare. Abdomen extending a little beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings broad. Fore wings straight in front, rounded at the tips, hardly oblique along the exterior border.

This genus seems to be allied to the *Notodontidæ*.

1. Eogena Contaminei.

Roseo-cervina; ciliæ concolores; abdomen subtestaceum; alæ anticæ punctis nonnullis discalibus fuscis; posticæ pallidissime roseæ, basi albicantes.

Noctua Contaminei, *Kindermann; Eversm. Bull. Soc. Imp. Nat. Mosc.* xx. 3, 77, 13, pl. 5, f. 6.
Eogena Contaminei, *Guen. Noct.* i. 341, 569.
Sarepta.

Genus 3. PACHNOBIA.

Corpus vix robustum. Proboscis brevis. Palpi porrecti, caput superantes; articulus 2us 3o cylindrico triplo longior. Antennæ corporis dimidio longiores. Abdomen alas posticas vix superans. Pedes mediocriter validi; tibiæ posticæ calcaribus longis. Alæ latæ; anticæ apud costam rectæ, apice subrectangulatæ, margine exteriore subconvexo. *Mas.*—Antennæ mediocriter pectinatæ.

Pachnobia, *Guen. Noct.* i. 341.
Diarsia, p., *Hübn. Verz. Schmett.* 222.
Orthosia, p., *Boisd.; Dup.; Herr.-Schæff.; Steph.*
Hadena, p., *Zett.*
Agrotis, p., *Herring.*

Body hardly stout. Proboscis short. Palpi porrect, extending somewhat beyond the head; third joint cylindrical, about one-third of the length of the second. Antennæ more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings broad. Fore wings straight in front, almost rectangular at the tips, slightly oblique along the exterior border. *Male.*—Antennæ moderately pectinated.

1. Pachnobia carnea.

Fusco-cinerascens; alæ anticæ lineis transversis angulosis canis et nigricantibus, striga discali nigro-fusca, orbiculari albida subovata maxima, reniformi albido marginata strigaque cervino combinatis.

Noctua carnea, *Thunb. Diss.* iv. 56; *Mus. Acad. Upsal.* vi. 72.
Noctua ampla, *Hübn. Eur. Schmett. Noct.* f. 425.
Noctua tecta, *Hübn. Eur. Schmett. Noct.* f. 377.
Diarsia carnea, *Hübn. Verz. Schmett.* 222, 2223.
Orthosia carnea, *Treit. Schmett.* 226. *Dup. Hist. Nat. Lép. Fr.* iii. 196, pl. 62. *Boisd. Ind. Méth.* 142, 1149. *Zett. Ins. Lapp.* 945. *Herr.-Schæff. Eur. Schmett.* ii. 198, 49; ii. *Noct.* pl. 78, f. 401.

Graphiphora carnea, *Ahrens, Faun. Ins. Eur.* vi. fig. 19.
Pachnobia carnea, *Guen. Noct.* i. 342, 570.

Sweden. Lapland.

2. PACHNOBIA HYPERBOREA.

Alæ anticæ cinereæ, parce fusco maculatæ nigroque subirroratæ, strigis duabus repandis obscuris externe cano marginatis, intra quas maculis ordinariis ferrugineo-tinctis positis; posticæ subcinereæ.

Noctua hyperborea, *Dalm. MSS.*
Orthosia hyperborea, *Boisd. Ind. Méth.* 142, 1148.
Hadena hyperborea, *Zett. Ins. Lapp.* 938, 6.
Pachnobia hyperborea, *Guen. Noct.* i. 342, 571.

Lapland.

3. PACHNOBIA CARNICA.

Cinerea, P. hyperboreæ *affinis; alæ anticæ angustiores, plus nitentes, apice acutiores, maculis minoribus, reniformi minus rotundata, linea subterminali e maculis cuneatis nigricantibus; posticæ pallidiores.*

Agrotis carnica, *Herring, Ent. Zeit. Stett.* vii. 236, 5.
Agrotis egregia, *Lederer.*
Pachnobia carnica, *Guen, Noct.* i. 342, 572.
Agrotis alpina, *Westw. & H. Brit. Moths*, i. 118, pl. 23, f. 13.
Hadena hyperborea? *Dalm. MSS. Zett. Ins. Lapp.* 938.
Orthosia? hyperborea, *Steph. Cat. Lep. Brit. Mus.* 77, 14.

Scotland. North Europe.

4. PACHNOBIA GLACIALIS.

Alæ anticæ cæsio, rubro, hepatico, et fusco mixtæ, stigmatibus magnis pallidis.

Orthosia glacialis, *Kahr; Herr.-Schæff. Eur. Schmett.* ii. 198, 50; ii. *Noct.* pl. f. 421—424.
Pachnobia glacialis, *Guen. Noct.* i. 343, 573.

Swiss Alps.

Genus 4. CERAMICA.

Corpus mediocriter robustum. Proboscis mediocriter longa. Palpi porrecti, pilosi, caput vix superantes; articulus 3us longiconicus, minimus. Antennæ corporis dimidio multo longiores. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subacuminatæ, margine exteriore convexo sat obliquo. *Mas.*—Antennæ subciliatæ, vix serratæ.

Ceramica, *Guen. Noct.* i. 343.

Body moderately stout. Proboscis moderately long. Palpi porrect, pilose, hardly extending beyond the head; third joint elongate-conical, not more than one-sixth of the length of the second. Antennæ much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, slightly acuminated at the tips, convex and rather oblique along the exterior border. *Male.*—Antennæ minutely ciliated, hardly serrated.

South America.

1. Ceramica exusta.

Mas. *Ferruginea; abdomen pallide ferrugineum, basi cinereum; alæ anticæ costa vittaque discali diffusa nigricantibus; posticæ albæ.*

Ceramica exusta, *Guen. Noct.* i. 344, 574.

a. New York. Presented by E. Doubleday, Esq.

2. Ceramica vindemialis.

Rufa; abdomen canescens; alæ anticæ unicolores, maculis lineisque nullis; posticæ pallide rufescentes, ciliis albidis.

Ceramica vindemialis, *Guen. Noct.* i. 344, 576.

St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

3. Ceramica V-album.

Fusca; abdomen cinereum; alæ anticæ cinereo variæ, lineis transversis obscurioribus, macula orbiculari minima alba, reniformi sat magna albido ex parte marginata; posticæ pallidiores, ciliis canis.

Ceramica V-album, *Guen. Noct.* i. 345, 577.

a. East Florida. Presented by E. Doubleday, Esq.

Australia.

4. Ceramica Maryx.

Fœm. *Nigro-rubra; thorax villosus, subhirsutus; alæ anticæ plagis nonnullis subpallidioribus, lineis transversis indistinctis, macula reniformi e squamis nonnullis albidis; posticæ obscure cinereæ, linea duplici marginali ciliisque pallidioribus, subtus albidæ, costa lineaque mediana rubris.*

Ceramica Maryx, *Guen. Noct.* i. 344, 575.

Australia.

Genus 5. HYSSIA.

Corpus robustum. Proboscis breviuscula. Palpi graciles, incumbentes; articulus 2us hirsutus; 3us pilosus, 2o confusus. Antennæ graciles, breviusculæ, simplices, maris pubescentes. Thorax subrotundus, lanuginosus. Abdomen læve, carinatum, apice fasciculatum. Pedes graciles, mediocriter longi; tibiæ subpilosæ, non spinosæ. Alæ anticæ apud costam subrectæ, apice acuminatæ, margine exteriore integro subobliquo, maculis tribus optime determinatis, linea transversa submarginali conspicua.

Hyssia, *Guen. Noct.* i. 345.
Orthosia, p., *Herr.-Schæff.*

Body stout. Proboscis rather short. Palpi slender, incumbent; second joint hirsute; third pilose, hardly distinguishable from the second. Antennæ slender, rather short, simply pubescent in the male. Thorax nearly round, lanuginose. Abdomen smooth, keeled, tufted at the tip. Legs slender, of moderate length; tibiæ slightly pilose, without spines. Fore wings nearly straight along the fore border, acuminated at the tips, entire and slightly oblique along the exterior border; the three spots very distinct, and the submarginal transverse line well defined.

1. Hyssia cavernosa.

Subviolacea; alæ anticæ linea undulata basim versus flavida maculis nigris, maculis tribus discalibus nigris, margine interiore flavido.

Noctua cavernosa, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842, 3; *Faun. Volg-Ural.* 256.
Orthosia ornata, *Friv.; Herr.-Schæff. Schmett. Eur.* ii. *Noct.* pl. 10, f. 46, 47.
Hyssia cavernosa, *Guen. Noct.* i. 345, 578.
Orthosia cavernosa, *Herr.-Schæff. Eur. Schmett.* ii. 205, 79.

Casan. Ural District.

Genus 6. SEMIOPHORA.

Corpus robustum, pilosum. Proboscis mediocriter longa. Palpi porrecti, caput sat superantes; articulus 2us 3o longi-conico triplo longior. Antennæ corporis dimidio longiores. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus breviusculis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore mediocriter obliquo. *Mas.*—Antennæ subpectinatæ.

Episema, p., *Hübn. Verz. Schmett.* 224.
Orthosia, p., *Boisd. Herr.-Schæff.*
Semiophora, *Steph. Ill. Brit. Ent. Haust.* ii. 138. *Westw.*
Tæniocampa, p., *Guen.*

Body stout, pilose. Proboscis moderately long. Palpi porrect, extending somewhat beyond the head; third joint elongate-conical, about one-third of the length of the second. Antennæ more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four rather short spurs. Wings moderately broad. Fore wings with a black discal mark, straight in front, angular at the tips, moderately oblique along the exterior border. *Male.*—Antennæ slightly pectinated.

1. Semiophora gothica.

Cinereo-ferruginea; alæ anticæ guttis basalibus et costalibus maculisque duabus subquadratis discalibus nigris cano ex parte marginatis, macula antica excisa, lineis transversis canescentibus; posticæ cinereæ, ciliis pallidioribus.

——— ———, *Deg. Ins.* ii. 338, pl. 5. *Engr. Pap. d. Eur.* 422, a—c.

Phalæna-Noctua gothica, *Linn. Syst. Nat.* 851, 159. *Faun. Suec.* 1192. *Clerck, Icon.* pl. 1, f. 1. *Gmel. ed. Syst. Nat.* i. 5, 2568, 159.

Noctua gothica, *Fabr. Sp. Ins.* ii. 229, 102; *Mant. Ins.* ii. 164, 199; *Ent. Syst.* iii. 2, 85, 249. *Sepp. Ins.* 3, pl. 40. *Knock, Beit. Ins.* 86, pl. 4, f. 4—6. *Esp. Schmett.* iii. pl. 76, f. 1, 2. *Bork. Eur. Schmett.* iv. 484, 192. *Haw. Lep. Brit.* 69. *Treit. Schmett.* v. 1, 233, 12. *God. Hist. Nat. Lép. Fr.* v. pl. 61, f. 2. *Zett. Ins. Lapp.* 936. *Meig. Handb.* 155, 20, pl. 13, f. 1; *Syst. Besch.* iii. 100, 33, pl. 92, f. 11.

Noctua Nun-atrum, *Wien. Verz.* 78, 9. *Fabr. Mant. Ins.* ii. 155, 142; *Ent. Syst.* iii. 2, 66, 185. *Hübn. Eur. Schmett. Noct.* pl. 24, f. 112.

Phalæna-Noctua Nun-atrum, *Gmel. ed. Syst. Nat.* i. 5, 2542, 1031.

Phalæna Sigma, *Don. Nat. Hist. Brit. Ins.* xvi. 61, pl. 562.

Phalæna-Noctua C-nigrum, *Vill. Ent.* ii. 183.

Orthosia gothica, *Herr.-Schæff. Eur. Schmett.* ii. 196, 43. *Boisd. Ind. Méth.* 140, 1123.

Tæniocampa gothica, *Guen. Noct.* i. 347, 579.

Episema gothica, *Hübn. Verz. Schmett.* 224, 2248.

Semiophora gothica, *Steph. Ill. Brit. Ent. Haust.* ii. 138. *Westw. & H. Brit. Moths*, i. 134, pl. 27, f. 1.

a—d. England. Presented by H. Doubleday, Esq.
e—x. England. From Mr. Stephens' collection.
y—bb. Europe. From M. Becker's collection.
cc. ——— ?

2. Semiophora gothicina.

Schistaceo-cinerea; alæ anticæ linea undulata pallida denta, literam W *obsoletam formante, marginem versus late basim versus anguste obscurius terminata, macula inter stigmata quadrata ferruginea.*

Orthosia gothicina, *Herr.-Schæff. Schmett. Eur.* ii. 196, 44; ii. *Noct.* pl. 26, f. 125, 126.

Tæniocampa? gothicina, *Guen. Noct.* i. 348, 580.

Lapland.

3. Semiophora I-cinctum.

Cinereo-fusca; abdomen cinereum; alæ anticæ lineis transversis albidis, umbra discali nigra, annulis duobus maximis incompletis albidis; posticæ cinereæ, basi pallidiores.

Bombyx cincta, *Fabr. Mant. Ins.* ii. 155, 143. *Ent. Syst.* iii. 2, 66, 186. *Gmel. ed. Syst. Nat.* i. 5, 2542, 1032. *De Vill. Ent. Linn.*
Noctua I-cinctum, *Wien. Verz.* 78, 10. *Bork. Eur. Schmett.* iv. 508, 202. *Esp. Schmett.* iv. pl. 192, f. 5. *Hübn. Noct.* pl. 30, f. 144; *Larv. Lep.* iv. *Noct.* ii. *Gen.* H, a, b, f. 2. *Frey. Neu. Beit. Schmett.* iii. pl. 225.
Episema I-cinctum, *Hübn. Verz. Schmett.* 224, 2247.
Orthosia I-cinctum, *Treit Schmett.* v. 1, 115, 2; *Suppl.* x. 17. *Duponch. Pap. de France*, vi. 3, pl. 85, f. 2. *Boisd. Ind. Méth.* 139, 1122. *Guen. Ann. Soc. Ent. Fr.* vi. 241; *Meig. Syst. Besch. Eur. Schmett.* iii. 59, 2, pl. 89, f. 9.
Tæniocampa I-cinctum, *Guen. Noct.* i. 348, 581.
Orthosia I-cinctum, *Herr.-Schæff. Eur. Schmett.* ii. 195, 39.

Hungary.

Genus 7. TÆNIOCAMPA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, porrecti, pilosi, caput vix superantes; articulus 2us 3o conico quadruplo longior. Antennæ corporis dimidio longiores. Abdomen alas posticas paullo aut vix superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ sat aut mediocriter latæ; anticæ apud costam rectæ, apice plus minusve angulatæ, margine exteriore paullo aut mediocriter obliquo. *Mas.*—Antennæ subpectinatæ aut vix pectinatæ.

Cerastis, Orthosia, p., Cuphanoa, et Monima, *Hübn. Verz. Schmett.* 228.
Tæniocampa, *Guen. Ann. Soc. Ent. Fr.* viii. 477; *Noct.* i. 346.
Orthosia et Cerastis, p., *Ochs.; Treits.; Boisd.; Herr.-Schæff.*
Orthosia, Glæa, p., et Semiophora, *Steph.*

Body stout. Proboscis moderately long. Palpi stout, porrect, pilose, hardly extending beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ more than half the length of the body. Abdomen extending a little or hardly beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings rather or moderately broad. Fore wings without a black discal mark, straight in front, more or less angular at the tips, slightly or moderately oblique along the exterior border. *Male.*—Antennæ slightly or hardly pectinated.

Europe.

A. Alæ anticæ maculis albido irroratis. leucographa, *Wien. Ver*
B. Alæ anticæ maculis non albido irroratis.
A. Prothorax stramineus. - - - - Faceta, *Tre*
B. Prothorax non stramineus.
A. Alæ anticæ maculis albido marginatis.
a. Alæ anticæ canescentes.
i. Alæ posticæ cinereæ. - - - opima, *Hü*
ii. Alæ posticæ albæ. - - gracilis, *Wien. Ver*
b. Alæ anticæ cervinæ.
i. Alæ anticæ nigro conspersæ.
* Alæ posticæ cinereæ. - stabilis, *Wien. Ver*
** Alæ posticæ albæ, margine fuscescente. miniosa, *Wien. Ver*
ii. Alæ anticæ nigro non conspersæ. munda, *Wien. Ver*
A. Alæ anticæ maculis non albido marginatis.
a. Alæ anticæ fuscæ. - - - amicta, *Don*
b. Alæ anticæ rubricosæ. - - rubricosa, *Wien. Ve*
c. Alæ anticæ ferruginosæ. - - cruda, *Wien. Ver*
d. Alæ anticæ cinerascentes.
i. Alæ anticæ nigro conspersæ. - Populeti, *Fa*
ii. Alæ anticæ fusco conspersæ. - rorida, *Herr.-Sch*
iii. Alæ anticæ non conspersæ. - instabilis, *Wien. Ve*

1. Tæniocampa leucographa.

Cupreo-fusca ; palpi albo conspersi ; alæ anticæ maculis lineaq undulata albido irroratæ. Mas.—*Antennæ dentibus filifo mibus simpliciter ciliatis.*

Noctua leucographa, *Wien. Verz.* 21. *Bork. Eur. Schmett.* 187 *Hübn. Samml. Eur. Schmett. Noct.* f. 411, 572.
Orthosia leucographa, *Treit. Schmett. Eur.* ii. 118. *Boisd. Ic Méth.* 105, 788. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 440, p 39.
Orthosia Lepetitii, *Boisd. Icon Lép. d'Eur.* pl. 83, f. 2.
Tæniocampa leucographa, *Guen. Ann. Soc. Ent. Fr.* vi. 239; *Noc* i. 348, 582.
Orthosia leucographa, *Herr.-Schæff. Eur. Schmett.* ii. 197, 45.
Cerastis leucographa, *Hübn. Verz. Schmett.* 228, 2289.

France. Germany.

a. England. Presented by H. Doubleday, Esq.
b—d. England. From Mr. Stephens' collection.

2. Tæniocampa Faceta.

Fusca; caput, prothorax et macula orbicularis straminea; macula reniformis ferruginea.

rthosia Faceta, *Treit. Schmett. Eur. Suppl.* 35. *Herr.-Schæff. Eur. Schmett.* ii. 197, 46; ii. *Noct.* pl. 20, f. 98, 99.
æniocampa Faceta, *Guen. Noct.* i. 349, 583.
aples, Sicily.

3. Tæniocampa amicta.

Fœm. *Alæ anticæ fuscæ, nitidæ, maculis ordinariis subnotatis; posticæ cinereo infuscatæ; caput et prothorax subcinerea; thorax fuscus.*

rthosia amicta, *Donzel, Ann. Soc. Ent. Fr. 2me Sér.* v. 527, 2, pl. 8, No. 1, f. 3.
æniocampa amicta, *Guen. Noct.* i. 349, 584.
yères.

4. Tæniocampa rubricosa.

Albido-rubiginea; abdomen ferrugineum; alæ anticæ lituris costalibus lineisque transversis undulatis obscurioribus; posticæ canescentes, marginibus vix rubiginosis.

——— ———, *Röes. Ins. Bel.* iv. pl. 21, f. 1—3. *Engr. Pap. d'Eur.* 513, c.
octua rubricosa, *Wien. Verz.* M. 4. *Fabr. Bork. Eur. Schmett.* iv. 214. *Hübn. Eur. Schmett. Noct.* f. 430.
rthosia rubricosa, *Treit. Schmett. Eur.* ii. 396. *Dup. Hist. Nat. Lép. Fr.* iii. 99, pl. 79. *Boisd. Ind. Méth.* 141, 1138.
æniocampa rubricosa, *Guen. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 349, 585.
erastis rubricosa, *Hübn. Verz. Schmett.* 228, 2289.
læa rubricosa, *Steph. Ill. Brit. Ent. Haust.* ii. 160.
octua mucida, *Esp. Schmett.* iv. pl. 148, f. 4. *Bork. Eur. Schmett.* iv. 329.
octua pilicornis, *Brahm, Ins.* ii. 99.
Var. Noctua mista, *Hübn. Eur. Schmett. Noct.* f. 507.
Var. Noctua rufa, *Hübn. Eur. Schmett. Noct.* f. 211.

o—p. England. From Mr. Stephens' collection.
q—v. England.
u, w. Europe. From M. Becker's collection.

5. Tæniocampa instabilis.

Murina; abdomen cinereo-fuscum; alæ anticæ lituris costalibus unaque exteriore discali nigris, orbiculari et reniformi subobsoletis; posticæ cinereo-fuscæ, ciliis pallidioribus.

——— ———, *Röes. Ins. Bel.* i. pl. 53, f. 1—4. *Engr. Pap. d'Eur.* 414.

Phalæna-Noctua instabilis, *Gmel. ed. Syst. Nat.* i. 5, 2547, 1058.

Noctua instabilis, *Wien. Verz.* 76, 1. *Fabr. Mant. Ins.* ii. 146, 88; *Ent. Syst.* iii. 2, 44, 119. *Esp. Schmett.* iv. pl. 151, f. 3. *Bork. Eur. Schmett.* iv. 591, 245. *Hübn. Eur. Schmett. Noct.* pl. 35, f. 65. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 81, f. 3. *Frey. Neu. Beit. Schmett.* pl. 315; *Ent. Zeit. Stett.* ii. 96.

Orthosia instabilis, *Hübn. Verz. Schmett.* 228, 2290. *Treit. Schmett. Eur.* v. 2, 104, 2. *Herr.-Schaff. Eur. Schmett.* ii. 202, 66. *Boisd. Ind. Méth.* 141, 1141. *Steph. Ill. Brit. Ent. Haust.* ii. 140. *Westw. & H. Brit. Moths*, i. 134, pl. 27, f. 2—4

Tæniocampa instabilis, *Guen. Noct.* i. 350, 586.

Noctua trigutta, *Esp. Schmett.* iv. pl. 147, f. 4.

Noctua contracta, *Esp. Schmett.* iv. pl. 151, f. 2.

Noctua (Orthosia) instabilis, *Meig. Handb.* 167, 50; *Syst. Besch.* iii. 2, 112, 53, pl. 97, f. 7.

Bombyx subsetaceus, *Haw. Lep. Brit.* 129.

Bombyx angustus, *Haw. Lep. Brit.* 77, 122.

Bombyx fuscatus, *Haw. Lep. Brit.* 70, 120.

Bombyx nebulosus, *Haw. Lep. Brit.* 71, 120.

Noctua collinita, *Esp. Schmett.* iv. pl. 152, f. 6.

a—bb. England. From Mr. Stephens' collection.

cc—ii. England.

jj, kk. Europe. From Mr. Becker's collection.

6. Tæniocampa opima.

Canescens; abdomen testaceum; alæ anticæ annulis duobus discalibus lineaque transversa exteriore albidis fusco marginatis, fascia media lata obliqua fusca; posticæ cinereæ, macula discali margineque subfuscescentibus.

——— ———, *Engr. Pap. d'Eur.* 414, g, h.

Noctua opima, *Hübn. Eur. Schmett. Noct.* f. 424.

Orthosia opima, *Treit. Schmett. Eur.* ii. 219. *Eversm. Faun. Volg.-Ural.* 49. *Herr.-Schaff. Eur. Schmett.* ii. 205, 76. *Boisd. Ind. Méth.* 141, 1145.

Tæniocampa opima, *Guen. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 352, 588.
Noctua firma, *Hübn. Samml. Eur. Schmett.* f. 676, 677.
Orthosia firma, *Hübn. Verz. Schmett.* 229, 2291.

a—f. England. From Mr. Stephens' collection.
g, h. England. From Mr. Carter's collection.

7. Tæniocampa Populeti.

Cinerascens; alæ anticæ nigro conspersæ, lineis duabus transversis e guttis nigris, macula apud disci apicem nigricante, orbiculari et reniformi subobsoletis; posticæ canescentes, ciliis albis.

———, *Engr. Pap. d'Eur.* 414, i?
Bombyx Populeti, *Fabr. Ent. Syst.* iii. 1476, 215.
Orthosia Populeti, *Treit. Schmett. Eur.* ii. 251. *Boisd. Ind. Méth.* 141, 1146. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 311, pl. 29. *Herr.-Schæff. Eur. Schmett.* ii. 202, 65, pl. 22, f. 109. *Steph. Cat. Brit. Lep.* 75.
Tæniocampa Populeti, *Guen. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 353, 589.
Noctua ocularis, *Frey. Beit.* i. 168, pl. 95, f. 2.
Bombyx subplumbeus, *Haw. Lep. Brit.* 75, 121.
Orthosia gracilis, *Steph. Ill. Brit. Ent. Haust.* ii. 141.
Orthosia intermedia, *Steph. Ill. Brit. Ent. Haust.* ii. 140.

a—l. England. From Mr. Stephens' collection.
m, n. England. From Mr. Carter's collection.

8. Tæniocampa stabilis.

Cervina aut cervino-cinerea; alæ anticæ nigro subconspersæ, lineis transversis guttularibus nigris nonnunquam obsoletis, linea exteriore albida, orbiculari et reniformi albido marginatis sæpissime magnis; posticæ pallide cinereæ.

———, *Albin, Nat. Hist. Engl. Ins.* pl. 75, a—d. *Engr. Pap. d'Eur.* 412, b. *Röes. Ins.* i. 2, pl. 53.
Noctua stabilis, *Wien. Verz.* 76, 2. *Bork. Eur. Schmett.* iv. 588, 244. *Hübn. Eur. Schmett. Noct.* pl. 36, f. 171. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 81, f. 2.
Noctua Cerasi, *Fabr. Sp. Ins.* ii. 219, 58; *Mant. Ins.* ii. 146, 87; *Ent. Syst.* iii. 2, 44, 118. *Haw. Lep. Brit.* 80.
Bombyx obliqua, *De Vill. Ent. Lin.* 147, pl. 5, f. 7.

Noctua rufamulata, *Haw. Lep. Brit.* 246.
Noctua pallida, *Haw. Lep. Brit.* 242.
Phalæna-Noctua Cerasi, *Gmel. ed. Syst. Nat.* i. 5, 2547, 1057.
Noctua (Orthosia) stabilis, *Meig. Handb.* 168, 51; *Sgst. Beech.* iii. 112, 54, pl. 97, f. 5.
Bombyx obliqua, *Vill. Ent.* 147, pl. 5, f. 7.
Bombyx junctus, *Haw. Lep. Brit.* 81.
Cuphanoa stabilis, *Hübn. Verz. Schmett.* 230, 2304.
Orthosia stabilis, *Treit. Schmett.* v. 223, 10. *Steph. Ill. Brit. Ent. Haust.* ii. 143. *Westw. & H. Brit. Moths*, i. 137, pl. 28, f. 1. *Boisd. Ind. Méth.* 142, 1147. *Herr.-Schæff. Eur. Schmett.* ii. 204, 73.
Tæniocampa stabilis, *Guen. Noct.* i. 354, 590.

a—hh. England. From Mr. Stephens' collection.
ii—nn. England.
oo, pp. Europe. From M. Becker's collection.

9. Tæniocampa rorida.

Pallide cinerea; alæ anticæ fusco irroratæ, signaturis obsoletissimis, stigmate reniformi parvo nigro.

Orthosia rorida, *Herr.-Schæff. Schmett. Eur.* ii. 206, 81; ii. *Noct.* pl. 10, f. 48.
Tæniocampa rorida, *Guen. Noct.* i. 355, 592.
Balkan Mountains.

10. Tæniocampa gracilis.

Cana; abdomen testaceo-albidum; alæ anticæ lineis transversis nigris guttularibus, linea transversa exteriore albida, orbiculari et reniformi albido marginatis, hac magna nigricanta, illa subrotunda; posticæ albæ, macula discali margineque fuscescentibus.

——— ———, *Engr. Pap. d'Eur.* 414, a—c.
Phalæna-Noctua gracilis, *Gmel. ed. Syst. Nat.* i. 5, 2548, 1068.
Noctua gracilis, *Wien. Verz.* 76, 4. *Fabr. Mant. Ins.* ii. 148, 98; *Ent. Syst.* iii. 2, 48, 132. *Bork. Eur. Schmett.* iv. 597, 247. *Hübn. Eur. Schmett. Noct.* pl. 135, f. 168. *Dup. Hist. Nat. Lép. Fr.* 141, pl. 82, f. 1. *Frey. Neu. Beit. Schmett.* iv. pl. 317.
Orthosia gracilis, *Hübn. Verz. Schmett.* 229, 2295. *Treit. Schmett. Eur.* v. 217, 7. *Boisd. Ind. Méth.* 140, 1129, *Herr.-Schæff. Eur. Schmett.* ii. 204, 74; ii. *Noct.* pl. 74, f. 383. *Steph. Cat. Brit. Lep.* 75.

Noctua collinita, *Esp. Schmett.* iv. pl. 152, f. 6.
Noctua lepida, *Scriba, Ins.* iii. pl. 18, f. 7. *Bork. Schmett.* iv. 249.
Bombyx sparsus, *Haw. Lep. Brit.* 122, 79.
Noctua (Orthosia) gracilis, *Meig. Syst. Besch.* iii. 114, 57, pl. 98, f. 2.
Orthosia sparsa, *Steph. Ill. Brit. Ent. Haust.* ii. 147. *Westw. & H. Brit. Moths*, i. 136, pl. 28, f. 12.
Orthosia pallida, *Steph. Ill. Brit. Ent. Haust.* ii. 143.
Tæniocampa gracilis, *Guen. Noct.* i. 355, 593.

a—q. England. From Mr. Stephens' collection.
r. England. From Mr. Carter's collection.
s—t. England.
u, u. Europe. From M. Becker's collection.

11. Tæniocampa miniosa.

Pallide cervina; abdomen canum; alæ anticæ nigro conspersæ, annulis duobus discalibus pallidioribus, lineis transversis subobsoletis obscurioribus; posticæ albæ, atomis margineque fuscescentibus.

——— ———, *Engr. Pap. d'Eur.* 411, a—c.
Phalæna-Noctua miniosa, *Gmel. ed. Syst. Nat.* i. 5, 2553, 1097.
Noctua miniosa, *Wien. Verz.* 88, 14. *Fabr. Mant. Ins.* ii. 145, 85; *Ent. Syst.* iii. 2, 43, 114. *Sepp, Ins.* ii. pl. 5, f. 6, 7. *Bork. Eur. Schmett.* iv. 645, 272. *Hübn. Eur. Schmett. Noct.* pl. 36, f. 174. *Haw. Lep. Brit.* 233. *Dup. Hist. Nat. Lep. Fr.* vi. 138, pl. 81, f. 6. *Frey. Neu. Beit. Schmett.* iv. pl. 340.
Orthosia miniosa, *Treit. Schmett. Eur.* v. 228, 12. *Herr.-Schæff. Eur. Schmett.* ii. 201, 61. *Boisd. Ind. Méth.* 142, 1150. *Steph. Ill. Brit. Ent. Haust.* ii. 144. *Westw. & H. Brit. Moths*, i. 137, pl. 28, f. 2, 3.
Tæniocampa miniosa, *Guen. Noct.* i. 356, 594.
Monima miniosa, *Hübn. Verz. Schmett.* 229, 2296.
Bombyx rubricosa, *Esp. Schmett.* iii. pl. 75, f. 3, 4.

a—j. England. From Mr. Stephens' collection.
k—m. England.
n—q. Europe. From M. Becker's collection.

12. Tæniocampa munda.

Cervina; abdomen cinerascens; alæ anticæ linea transversa exteriore albida guttis paucis nigris conjuncta, orbiculari et reniformi albido marginatis, hac postice nigro marginata, illa subovata obliqua; posticæ, macula discali fusca, ciliis pallidis.

——— ———, *Engr. Pap. d'Eur.* 396, a—c.

Phalæna-Noctua munda, *Gmel. ed. Syst. Nat.* i. 5, 2548, 1065.

Noctua munda, *Wien. Verz.* 76, 7. *Fabr. Mant. Ins.* ii. 147, 95; *Ent. Syst.* iii. 2, 48, 129. *Esp. Schmett.* iii. pl. 52, f. 6. *Bork. Eur. Schmett.* iv. 603, 252. *Hübn. Eur. Schmett. Noct.* pl. 45, f. 166.

Orthosia munda, *Hübn. Verz. Schmett.* 229, 2293. *Treit. Schmett. Eur.* v. 208, 3. *Frey. Neu. Beit. Schmett.* iv. pl. 328. *Steph. Ill. Brit. Ent. Haust.* ii. 141. *Westw. & H. Brit. Moths*, i. 135, pl. 27, f. 1. *Herr.-Schæff. Eur. Schmett.* ii. 202, 64. *Boisd. Ind. Méth.* 141, 1140.

Tæniocampa munda, *Guen. Noct.* i. 356, 595.

Noctua lota, *Dup. Hist. Nat. Lép. Fr.* vi. 111, pl. 80, f. 3.

Noctua genuina, *Bork. Eur. Schmett.* iv. 705, 311.

Bombyx bimaculatus, *Haw. Lep. Brit.* 121, 74.

Bombyx geminatus, *Haw. Lep. Brit.* 121, 73.

Noctua (Orthosia) munda, *Meig. Syst. Besch.* iii. 113, 55, pl. 98, f. 1.

a—o. England. From Mr. Stephens' collection.
p—t. England.
v, u. Europe. From M. Becker's collection.

13. Tæniocampa cruda.

Ferrugineo-cinerea; palpi extus nigri; abdomen pallide cinerascens; alæ anticæ ferruginosæ, lineis transversis indistinctis testaceis, macula discali cinerea testaceo marginata, punctis marginalibus nigris; posticæ basi ciliisque pallidioribus.

——— ———, *Albin, Nat. Hist. Engl. Ins.* pl. 23, f. 34. *Engr. Pap. d'Eur.* 413, a, b.

Noctua cruda, *Wien. Verz.* 77, 9. *Kléem, Beit. Ins. Ges.* i. pl. 46.

Noctua pulverulenta, *Esp. Schmett.* iii. pl. 76, f. 5, 6. *Bork. Eur. Schmett.* iv. 611, 256.

Noctua ambigua, *Hübn. Eur. Schmett. Noct.* pl. 36, f. 173. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 76, f. 3.

Bombyx nanus, *Haw. Lep. Brit.* 82.

Noctua pusilla, *Haw. Lep. Brit.* 124, 250.

Orthosia

Orthosia cruda, *Steph. Ill. Brit. Ent. Haust.* ii. 144. *Westw. & H. Brit. Moths*, i. 137, pl. 27, f. 11; 28, f. 2, 3. *Herr.-Schæff. Eur. Schmett.* ii. 201, 60.
Orthosia ambigua, *Boisd. Ind. Méth.* 142, 1151.
Tæniocampa cruda, *Guen. Noct.* i. 357, 596.
Monima ambigua, *Hübn. Verz. Schmett.* 229, 2297.
Noctua (Orthosia) cruda, *Meig. Syst. Besch.* iii. 115, 60, pl. 99, f. 1.

a—u. England. From Mr. Stephens' collection.
w, bb. England.
cc—ee. Europe. From M. Becker's collection.

North America.

A. Alæ anticæ maculis flavo marginatis. - - alia, *Guen.*
A. Alæ anticæ maculis connexis. - - Hibisci, *Guen.*
B. Alæ anticæ maculis non connexis.
C. Alæ anticæ maculis subobsoletis. - Styracis, *Guen.*
B. Alæ anticæ maculis non flavo marginatis. - oviduca, *Guen.*

14. Tæniocampa alia.

T. instabili *affinis, rufo-cinerea; alæ anticæ ferrugineo conspersæ, macula orbiculari magna vix rotundata, reniformi arctata nigro postice conspurcata, lineis subobsoletis; posticæ nigro-cinereæ, ciliis costa basique rufescentibus pallidioribus.*

Tæniocampa alia, *Guen. Noct.* i. 352, 587.

New York.

15. Tæniocampa Hibisci.

T. stabili *affinis; antennæ* maris *non pectinatæ; alæ anticæ linea submarginali magis flexuosa, maculis duabus discalibus semper connexis.*

Tæniocampa Hibisci, *Guen. Noct.* i. 355, 591.

Georgia.

16. Tæniocampa oviduca.

T. crudæ *simillima; palpi fere unicolores; alæ anticæ minus conspersæ, linea submarginali completa tenui flavescente bene determinata, maculis bene determinatis nigro notatis flavo marginatis, reniformi extus minus excavata.*

Tæniocampa oviduca, *Guen. Noct.* i. 357, 597.

North America.

17. TÆNIOCAMPA STYRACIS.

T. instabili *affinis; alæ anticæ carneo-cinereæ, fusco punctatæ, spatio mediano lato magis rufescente, maculis suboboleteis; posticæ pallide carneo-rufescentes, striga discali lineaque mediana rufo-fuscis.*

Tæniocampa Styracis, *Guen. Noct.* i. 357, 598.

Georgia.

South America.

18. TÆNIOCAMPA SUBSOCIA.

T. mundæ *affinis, cervina; abdomen cinerascens; alæ anticæ lineis transversis suboboleteis, guttis exterioribus nigris, macula una costali subapicali alteraque apud angulum interiorem nigris, orbiculari minima, reniformi magna; posticæ fuscæ, ciliis pallide cervinis.*

Allied to *T. munda. Male.* Pale fawn-colour. Abdomen more cinereous. Lappets of the thorax with brown borders. Fore wings with the transverse lines almost obsolete; two more distinct exterior rows of blackish dots; a blackish spot near the tip of the costa, and another more distinct one by the interior angle, and a blackish dot near the base of the interior border; orbicular spot very small; reniform large. Hind wings brown, with pale fawn-coloured ciliæ. Length of the body 7 lines; of the wings 16 lines.

Brazil. In Mr. Saunders' collection.

New Zealand.

19. TÆNIOCAMPA IMMUNIS.

Fœm. *Roseo-rufa; abdomen cinereum, apice cervinum; alæ anticæ fasciis indistinctis cinereis undulatis fusco marginatis, fascia exteriore e guttis albidis, linea marginali testacea, reniformi cinereo-fusco notata et marginata; posticæ cinereæ, ciliis testaceis.*

Female. Rosy-red. Abdomen cinereous, fawn-colour towards the tip. Fore wings with very indistinct cinereous undulating

brown-bordered bands; exterior band consisting of whitish dots; marginal line testaceous; claviform and orbicular spots nearly obsolete; reniform cinereous, marked and bordered with brown. Hind wings cinereous, with testaceous cilia. Length of the body 6 lines; of the wings 14 lines.

a. New Zealand. Presented by the Rev. W. Colenso.

Genus 8. ORTHOSIA.

Corpus robustum, pilosum. Proboscis mediocriter longa. Palpi validi, pilosi, porrecti, caput vix superantes; articulus 3us minimus. Antennæ corporis dimidio valde longiores. Abdomen alas posticas plus minusve superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore mediocriter obliquo. *Mas.*— Antennæ plus minusve ciliato-serratæ.

Orthosia p., *Och. Syst. Gloss. Schmett. von Eur.* iv.; *Treit.; Dup.; Boisd.; Steph.; Herr.-Schæff.; Guén. Ann. Soc. Ent. Fr.* viii. 480; *Noct.* i. 358.
Polia, p., *Herr.-Schæff.*
Caradrina, p., Orrhodia, p., Parastichtis, p., et Orthosia,p., *Hübn. Verz. Schmett.*

Body stout, pilose. Proboscis moderately long. Palpi stout, pilose, porrect, hardly extending beyond the head; third joint very minute, much less than one-fourth of the length of the second. Antennæ much more than half the length of the body. Abdomen extending a little or as much as one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, angular at the tips, moderately oblique along the exterior border. *Male.*—Antennæ more or less ciliate-serrate.

Europe.

A. Alæ anticæ nigro non variæ.
  A. Alæ anticæ murinæ aut cinerascentes.
    A. Alæ anticæ macula discali nigra.
      a. Alæ anticæ linea exteriore ferruginea. — Lota, *Linn.*
      b. Alæ anticæ linea nulla ferruginea.
        i. Alæ anticæ breviores. - - — ruticilla, *Esp.*
        ii. Alæ anticæ longiores. - - - - — lævis, *Hübn.*

B. Alæ anticæ macula nulla nigra.
a. Prothorax pallidus. - - - suspecta, *Hübn.*
b. Prothorax niger. - - - - murina, *Eversm.*
B. Alæ anticæ testaceæ. - - - Kindermannii, *Fisch.*
C. Alæ anticæ cervinæ. - - - - macilenta, *Hübn.*
B. Alæ anticæ nigro variæ. - - - Ypsilon, *Wien. Verz.*

1. Orthosia ruticilla.

Rubescente-cinerea, palpi rubescentes; alæ anticæ annulis duobus indistinctis discalibus albidis, linea transversa suboboeleta submarginali canescente, guttis marginalibus fuscescentibus canescente cinctis; posticæ cinereæ, ciliis subrubescentibus.

Noctua ruticilla, *Esp. Schmett.* pl. 157, f. 1.
Noctua Serpylli, *Hübn. Eur. Schmett. Noct.* f. 488. *Dup. Hist. Nat. Lép. Fr.* iii. 67, pl. 76.
Orthosia ruticilla, *Treit. Schmett. Eur.* vi. 409. *Boisd. Ind. Méth.* 142, 1152. *Guen. Ann. Soc. Ent. Fr.* vi. 242; *Noct.* i. 359, 599. *Herr.-Schæff. Eur. Schmett.* ii. 204, 75; ii. *Noct.* pl. 1407, 79.
Orrhodia Serpylli, *Hübn. Verz. Schmett.* 231, 2320.
Orthosia Ilicis, *Boisd. Ind. Addend.* 5. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 303, pl. 28.

England.

a, *b*. Europe. From M. Becker's collection.

2. Orthosia lævis.

Cinerea; alæ anticæ cervino tinctæ, lineis transversis undulatis guttularibus et integris pallidioribus et nigricantibus, maculis orbiculari et reniformi marginibus pallidioribus fuscisque, hac nigro notata, illa rotunda; posticæ obscuriores, ciliis pallidis.

Orthosia lævis, *Treit. Schmett. Eur.* v. 232. *Boisd. Ind. Méth.* 140, 1130. *Guen. Ann. Soc. Ent. Fr.* vi. 242; *Noct.* i. 359, 600. *Herr.-Schæff. Eur. Schmett.* ii. 202, 68.
Caradrina lævis, *Hübn. Verz. Schmett.* 239, 2309.

a. Europe. From M. Becker's collection.
b. Europe. From Mr. Milne's collection.

3. Orthosia suspecta.

Var. *Cinerea; abdomen canum; alæ anticæ cervino suffusæ, annulis duobus discalibus albidis, linea undulata interiore lineisque duabus e punctis exterioribus nigricantibus; posticæ canæ, macula discali margineque cinereis.*

Noctua suspecta, *Hübn. Eur. Schmett. Noct.* f. 633.
Parastichtis suspecta, *Hübn. Verz. Schmett.* 213, 2123.
Orthosia lævis, *Dup. Hist. Nat. Lép. Fr.* iii. 65, pl. 76.
Orthosia suspecta, *Guen. Noct.* i. 360, 601.
Noctua congener, *Geyer, Samml. Eur. Schmett.* f. 862.
Noctua iners, *Germ. Faun. Ins. Eur. Fasc.* 16, pl. 24. *Dup. Hist. Nat. Lép. Fr. Suppl.* 292, pl. 27, f. 2, a.
Orthosia suspecta, *var.* A. congener, *Guen. Noct.* i. 360.

France. Hungary.

a—f. England. From Mr. Stephens' collection.
g—j. England. From Mr. Carter's collection.
k—n. Europe. From M. Becker's collection.

4. Orthosia Kindermannii.

Testacea; alæ anticæ fasciis plurimis undulosis atomisque cervinis, guttis exterioribus fuscis, maculis cervino marginatis, reniformi nigro signata; posticæ cinereæ, ciliis testaceis.

Noctua Kindermannii, *Fisch.-v-Rosl. Abbild.* 77, pl. 36. *Frey. Neu. Beit. Schmett.* iv. pl. 327.
Orthosia Kindermannii, *Herr.-Schæff. Schmett. Eur.* ii. 197, 48. *Guen. Noct.* i. 361, 603.
Orthosia Ballotæ, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii 600, pl. 50. *Guen. Ann. Soc. Ent. Fr.* vi. 242.

Dalmatia.

a—d. Europe. From M. Becker's collection.

5. Orthosia Ypsilon.

Cervino-cinerea; abdomen et alæ posticæ pallidiora; alæ anticæ macula U *formi discali, striga postica gutta interiore lunulisque marginalibus nigricantibus.*

———, *Engr. Pap. d'Eur.* 476, d.
Noctua Ypsilon, *Wien. Verz.* 78, 13. *Sepp, Ins.* iii. pl. 37. *Bork. Eur. Schmett.* iv. 503, 200. *Hübn. Eur. Schmett. Noct.* pl. 29, f. 136. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 81, f. 5. *Frey. Beit.* iv. pl. 329.

Noctua corticea, *Esp. Schmett.* iv. pl. 145, f. 2, 3.
Noctua fissipuncta, *Haw. Lep. Brit.* 105.
Noctua Nun-atrum et N. Ypsilon, *Scriba, Beit. Ins. Gea.* pl. 9, f. 6.
Exarnis Ypsilon, *Hübn. Verz. Schmett.* 225, 2258.
Polia Ypsilon, *Herr.-Schæff. Eur. Schmett.* ii. 262, 242.
Orthosia Ypsilon, *Treit. Schmett.* v. 210, 4. *Steph. Ill. Brit. Ent. Haust.* ii. 149. *Boisd. Ind. Méth.* 141, 1142. *Guen. Noct.* i. 361, 604.
Noctua (Orthosia) Ypsilon, *Meig. Syst. Besch.* iii. 113, 56, pl. 98, f. 9.

a, b. England. Presented by W. Wing, Esq.
c. England. Presented by E. Doubleday, Esq.
d—l. England. From Mr. Stephens' collection.
m, n. England.
o—q. Europe. From M. Becker's collection.

6. Orthosia Lota.

Murina; antennæ fulvescentes; alæ anticæ punctis nonnullis guttaque discali nigris, annulis duobus lineaque transversa exteriore ferrugineis cano marginatis; posticæ gutta discali nigricante.

——— ———, *Deg. Ins.* ii. 419, pl. 7. *Engr. Pap. d'Eur.* 400, a—c.
Phalæna-Noctua Lota, *Linn. Syst. Nat.* ii. 1137. *Clerck, Icon.* pl. 8, f. 1.
Noctua Lota, *Wien. Verz.* 76, 6. *Esp. Schmett.* iv. pl. 67, f. 1. *Sepp. Ins.* iii. pl. 38. *Bork. Eur. Schmett.* iv. 250. *Haw. Lep. Brit.* 239. *Frey. Beit.* pl. 131.
Bombyx Lota, *Fab. Ent. Syst.* iii. 1, 145. *Haw. Lep. Brit.* 78.
Orthosia Lota, *Hübn. Verz. Schmett.* 229, 2292. *Treit. Schmett.* ii. 212. *Steph. Ill. Brit. Ent. Haust.* ii. 147. *Boisd. Ind. Méth* 141, 1142. *Guen. Noct.* i. 362, 605. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 298, pl. 27. *Westw. & H. Brit. Moths*, i. 137, pl. 28, f. 9. *Herr.-Schæff. Schmett. Eur.* ii. 205, 77.
Noctua Hippophaes, *Rossi, Mant.* ii. 411.
Noctua munda, *Hübn. Eur. Schmett. Noct.* pl. 35, f. 167.

a, b. England. Presented by J. C. Dale, Esq.
c. England. Presented by E. Doubleday, Esq.
d—k. England. From Mr. Stephens' collection.
l—n. England.
o—q. Europe. From M. Becker's collection.

7. Orthosia macilenta.

Lateritia; alæ anticæ atomis guttaque discali nigris. Mas.—*Abdomen cinerascens, apice lateritium; alæ anticæ annulo oblongo lineaque transversa exteriore testaceis cervino marginatis; posticæ murinæ, gutta discali obscuriore, ciliis lateritiis.* Fœm.—*Alæ anticæ testaceo variæ, posticæ subtestaceæ, apud discum diffuse submurinæ.*

Noctua macilenta, *Hübn. Eur. Schmett. Noct.* pl. 89, f. 418. *Haw. Lep. Brit.* 230. *Dup. Hist. Nat. Lép. Fr.* iv. 64, pl. 104, f. 5. *Frey. Neu. Beit. Schmett.* iii. pl. 251.

Orthosia macilenta, *Hübn. Verz. Schmett.* 229, 2294. *Treit. Schmett. Eur.* ii. 215. *Boisd. Ind. Méth.* 141, 1139. *Guen. Ann. Soc. Ent. Fr.* vi. 242; *Noct.* i. 362, 606. *Steph. Ill. Brit. Ent. Haust.* iii. 68. *Westw. & H. Brit. Moths*, i. 140, pl. 28, f. 9. *Herr.-Schæff. Schmett. Eur.* ii. 205, 78.

Noctua flavilinea, *Haw. Lep. Brit.* 243.

Orthosia flavilinea, *Steph. Ill. Brit. Ent. Haust.* ii. 148, pl. 19, f. 2.

a—k. England. From Mr. Stephens' collection.
l. Scotland. From Mr. Foxcroft's collection.
m, n. England.
o—r. Europe. From M. Becker's collection.

8. Orthosia? murina.

Fusco-cinerea; prothorax niger; alæ anticæ ciliis concoloribus, macula media obsoleta fusco signata, linea transversa basali et altera externa flexuosa dentatis nigris; posticæ pallide nigricantes, puncto medio nigriore.

Orthosia murina, *Eversm. Bull. Soc. Imp. Nat. Mosc.*

Balkan Mountains.

Asia.

9. Orthosia circumducta.

Fuscescens; alæ anticæ apud marginem exteriorem pallidiores, lineis transversis interiore et exteriore albidis, plaga maxima intermedia pallida orbicularem et reniformem includente; posticæ pallidiores, macula discali lineaque exteriore obscurioribus. Mas.—*Antennæ subpectinatæ.*

Orthosia circumducta, *Ledern, Verhandl. Zool. Botan. Verein in Wien.* viii. pl. 1, f. 9.

Altai, Siberia.

Australia.

10. Orthosia Pulvis.

Mas. O. suspectæ *similis, nigro-cinerea; antennæ submoniliformes, sat pubescentes, ciliis longioribus; alæ anticæ nigro-cinereæ, conspersæ, lituris obliteratis, maculis medianis minus conspersis cinereo marginatis; posticæ nigro-cinereæ, basi pallidiores, ciliis pallidis nigro interlineatis, subtus puncto discali lineaque vix distinctis.*

Orthosia pulvis, *Guen. Noct.* i. 361, 602.

Australia.

Genus 9. ANCHOCELIS.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, validi, pilosi, caput non superantes; articulus 3us minutus. Antennæ corporis dimidio valde longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore mediocriter obliquo. *Mas.*—Antennæ subciliatæ.

Orbona, p., Agrochola, Cuphanoa, Conistra, et Amathes, *Hübn. Verz. Schmett.* 232.

Anchocelis, *Guen. Ann. Soc. Ent. Fr.* viii.; *Noct.* i. 363. *Dup. Cat.*

Orthosia, p., *Treits.; Boisd.; Steph.; Meig.; Herr.-Schæff.*

Xanthia, p., *Treits.; Boisd.; Steph.*

Orbona, *Westw.*

Body stout. Proboscis moderately long. Palpi porrect, stout, pilose, not extending beyond the head; third joint minute, less than one-fourth of the length of the second. Antennæ much more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings moderately broad. Fore wings straight in front, angular at the tips, moderately oblique along the exterior border. *Male.*—Antennæ minutely ciliated.

Europe.

A. Alæ posticæ non maculatæ.

A. Alæ anticæ linea nulla discali albida.

a. Alæ anticæ strigis nullis costalibus nigris.

a. Palpi apice flavi. - - - rufina, *Wien. Verz.*

b. Palpi non apice flavi.

i. Alæ anticæ venis cervinis. - humilis, *Wien. Verz.*
ii. Alæ anticæ venis non cervinis. - hæmatidea, *Dup.*
B. Alæ anticæ strigis costalibus nigris.
a. Alæ anticæ macula costali subapicali nigra. litura, *Linn.*
b. Alæ anticæ macula nulla subapicali nigra.
i. Macula orbicularis nigro notata. pistacina, *Wien. Verz.*
ii. Macula orbicularis nigro non notata. nitida, *Wien. Verz.*
B. Alæ anticæ linea discali albida. - - neurodes, *Hübn.*
B. Alæ posticæ maculatæ. - - - - lunosa, *Haw.*

1. Anchocelis hæmatidea.

Rufescens; alæ anticæ cupreo-rufescentes; linea submarginali e guttis nigris, maculis orbicularibus et reniformi parvis contiguis pallido marginatis; posticæ cinereæ, ciliis rufescentibus. Mas.—Antennæ ciliatæ.

Noctua hæmatidea, *Dup. Hist. Nat. Lép. Fr.* iv. 365, pl. 122. *Frey. Neu. Beit. Schmett.* i. pl. 95, f. 4.
Orthosia hæmatidea, *Treit. Schmett. Eur. Suppl.* x. 76. *Boisd. Ind. Méth.* 141, 1136. *Herr.-Schæff. Schmett. Eur.* ii. 202, pl. 10, f. 49.
Anchocelis hæmatidea, *Guen. Ann. Soc. Ent. Fr.* vi. 242; *Noct.* i. 363, 607.

Central France. Italy.

2. Anchocelis rufina.

Rufo-cervina; abdomen cinerascens, lateribus cervinis; palpi apice flavi; pedes rufi, subtus flavi; alæ anticæ basi fasciaque rufis, fascia exteriore cinerascente marginibus undulatis testaceis, orbiculari et reniformi testaceis; posticæ cinereæ, marginibus pallide cervinis.

——— ———, *Engr. Pap. d'Eur.* 410, a—c.
Phalæna-Bombyx rufina, *Gmel. ed. Syst. Nat.* i. 5, 2436, 72.
Phalæna helvola, *Linn. Faun. Suec.* 1142. *Clerck. Icon.* pl. 4, f. 8.
Noctua rufina, *Wien. Verz.* 86, 9. *Fabr. Mant. Ins.* ii. 2, 142, 60; *Ent. Syst.* iii. 2, 32, 77. *Bork. Eur. Schmett.* iv. 351, 341. *Hübn. Eur. Schmett. Noct.* pl. 38, f. 184. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 103, f. 3.
Noctua catenata, *Esp. Schmett.* iv. pl. 123, f. 1.
Noctua punica, *Bork. Eur. Schmett.* iv. 687, 300.
Noctua (Orthosia) rufina, *Meig. Syst. Besch.* iii. 117, 63, pl. 99, f. 5.
Orthosia rufina, *Treit. Schmett.* v. 347, 4.
Bombyx helvola, *Haw. Lep. Brit.* 202.

Orbona rufina, *Hübn. Verz. Schmett.* 232, 2332. *Westw. & H. Brit. Moths*, i. 211, pl. 45, f. 11, 12.
Xanthia ? rufina, *Steph. Ill. Brit. Ent. Haust.* ii. 111, 65.
Anchocelis rufina, *Guen. Noct.* i. 364, 608.

a—n. England. From Mr. Stephens' collection.
o—s. England.
t—w. Europe. From M. Becker's collection.
x. Europe.

3. Anchocelis pistacina.

Rufescens, subtus cinerascens; abdomen cinereum; alæ anticæ lineis transversis indistinctis nigris ex parte guttularibus, costa ex parte albida nigro notata, orbiculari et reniformi cinereis nigro notatis, hac vix excavata, illa obliqua; posticæ cinereæ, ciliis pallidis.

Noctua pistacina, *Wien. Verz.* 77, 1. *Fabr. Mant. Ins.* ii. 175, 263; *Ent. Syst.* iii. 2, 109, 328. *Bork. Eur. Schmett.* iv. 523, 210. *Hübn. Eur. Schmett. Noct.* pl. 28, f. 131. *Haw. Lep. Brit.* 206.
Orthosia pistacina, *Treit. Schmett. Eur.* v. 139, 17. *Steph. Ill. Brit. Ent. Haust.* ii. 146. *Boisd. Ind. Méth.* 141, 1135. *Dup. Hist. Nat. Lép. Fr. Suppl.* vii. pl. 1, f. 3. *Herr.-Schæff. Schmett. Eur.* ii. 200, 55. *Westw. & H. Brit. Moths*, i. 138, pl. 28, f. 5—8.
Anchocelis pistacina, *Guen. Ann. Soc. Ent. Fr.* 242; *Noct.* i. 364, 609.
Phalæna-Noctua pistacina, *Gmel. ed. Syst. Nat.* i. 5, 2578, 1190.
Noctua Lychnidis, *Fabr. Mant. Ins.* ii. 146, 90; *Ent. Syst.* iii. 2, 45, 122. *Wien. Verz.* 76, 5. *Bork. Eur. Schmett.* iv. 598, 248. *Hübn. Eur. Schmett. Noct.* pl. 98, f. 464. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 80, f. 5.
Phalæna-Noctua Lychnidis, *Gmel. ed. Syst. Nat.* i. 5, 2547, 1060.
Noctua serina, *Esp. Echmett.* iv. pl. 156, f. 12.
Noctua rubetra, *Esp. Schmett.* iv. pl. 156, f. 3, 4.
Noctua canaria, *Esp. Schmett.* iv. pl. 156, f. 5, 6.
Noctua Schœnobæna ? *Esp. Schmett.* iv. pl. 157, f. 2, 3.
Noctua (Orthosia) pistacina, *Meig. Syst. Besch.* iii. 116, 61, pl. 97, f. 4.
Noctua lineola, *Donov. Brit. Ins.* pl. 360.
Noctua venosa, *Haw. Lep. Brit.* 209.

Noctua sphærulatina, *Haw. Lep. Brit.* 205.
Agrochola pistacina, *Hübn. Verz. Schmett.* 229, 2301.
Agrochola Lychnidis, *Hübn. Verz. Schmett.* 229, 2302.

a—aa. England. From Mr. Stephens' collection.
aaa—bbb. England.
ccc, ddd. Europe. From M. Becker's collection.
eee. Europe. From Mr. Milne's collection.

4. Anchocelis nitida.

Ferrugineo-cervina; abdomen cinereum, apice subtusque cervinum; alæ anticæ annulis duabus discalibus testaceis, lineis transversis tribus fuscis totidemque nigris guttisque exterioribus nigris; posticæ cinereæ, cervino ciliatæ.

———, *Engr. Pap. d'Eur.* 398, a—c.
Noctua nitida, *Wien. Verz.* 86, 4. *Fabr. Ent. Syst.* iii. 2, 31, 75. *Bork. Eur. Schmett.* iv. 337. *Hübn. Eur. Schmett. Noct.* f. 180. *Dup. Hist. Nat. Lép. Fr.* iv. 277, pl. 117. *Frey. Beit. Gesch. Schmett.* iii. pl. 118.
Noctua lucida, *Naturf. Ins.* ix. 122. *Berl. Mag.* iii. 54.
Orthosia nitida, *Treit. Schmett. Eur.* ii. 234; *Suppl.* x. 78. *Boisd. Ind. Méth.* 140, 1133. *Herr.-Schæff. Schmett. Eur.* ii. 200, 56.
Anchocelis nitida, *Guen. Noct.* i. 366, 610.
Cuphanoa nitida, *Hübn. Verz. Schmett.* 230, 2306.

a—d. Europe. From M. Becker's collection.

5. Anchocelis humilis.

Ferrea; abdomen fuscescens, apice ferreum; alæ anticæ fasciis tribus subobsoletis obscurioribus, maculis basalibus indistinctis nigricantibus, annulis duobus transversis discalibus venisque cervinis, lineis duabus transversis exterioribus e guttis fuscis cervino marginatis, posticæ nigro-cinereæ, ciliis cervinis.

Noctua humilis, *Wien. Verz.* 76, 3. *Fabr. Ent. Syst.* iii. 2, 45, 120. *Bork. Eur. Schmett.* iv. 246? *Hübn. Eur. Schmett. Noct.* f. 170. *Dup. Hist. Nat. Lép. Fr.* iv. 274, pl. 117
Orthosia humilis, *Treit. Schmett.* ii. 23. *Boisd. Ind. Méth.* 141, 1134. *Herr.-Schæff. Schmett. Eur.* ii. 200, 57.
Anchocelis humilis, *Guen. Noct.* i. 366, 611.
Cuphanoa humilis, *Hübn. Verz. Schmett.* 230, 2305.

a—c. Europe. From M. Becker's collection.

6. Anchocelis lunosa.

Rufescens aut fuscescens aut pallide cervina; alæ anticæ venis pallidioribus, fasciis nonnunquam obsoletis fuscescentibus, macula costali subapicali, orbiculari et reniformi nigricantibus, linea transversa submarginali e guttis nigris; posticæ albidæ, macula discali fasciaque exteriore fuscis, nonnunquam cinereo nebulosæ.

Noctua lunosa, *Haw. Lep. Brit.* 203.
Orthosia lunosa, *Curt. Brit. Ent.* pl. 237. *Steph. Ill. Brit. Ent. Haust.* ii. 147.
Anchocelis lunosa, *Guen. Noct.* i. 367, 612.
Anchocelis agrotoïdes, *Guen. Ann. Soc. Ent. Fr.* 485, 242.
Orthosia subjecta, *Dup. Hist. Nat. Lép. Fr.* iii. 295, pl. 27, f. 3. *Herr.-Schæff. Schmett. Eur.* ii. 199, pl. 57, f 289. (Neurodes).
Orthosia humilis, *var.*, *Boisd. Ind. Méth.* 141, 1134.
Var. Orthosia neurodes, *Herr.-Schæff. Schmett. Eur.* ii. pl. f. 94.

a. England. Presented by J. C. Dale, Esq.
b. England. Presented by E. Doubleday, Esq.
c—p. England. From Mr. Stephens's collection.
q, r. England. From Mr. Carter's collection.
s. England.
t, u. Europe. From M. Becker's collection.

7. Anchocelis neurodes.

Rufo-fusca; abdomen pallidum; alæ anticæ strigis costalibus nigris, lineis transversis testaceis, linea discali furcata albida; posticæ cinereæ, basi pallidiores, linea marginali nigra.

Noctua neurodes, *Hübn. Eur. Schmett. Noct.* f. 568.
Conistra neurodes, *Hübn. Verz Schmett.* 229, 2300.
Orthosia neurodes, *Boisd. Ind. Méth.* 141, 1137.
Anchocelis neurodes, *Guen. Ann. Soc. Ent. Fr.* vi. 242; *Noct.* i. 368, 613.

Dalmatia.

8. Anchocelis litura.

Ferrugineo-cinerea; abdomen cinereum; alæ anticæ annulis duobus lineisque transversis undulatis interioribus pallidioribus fusco marginatis, maculis quinque costalibus nigris; posticæ cinereæ, basi ciliisque pallidioribus.

——— ———, *Engr. Pap. d'Eur.* 399, a, b.
Phalæna-Noctua litura, *Linn. Faun. Suec.* 1213; *Syst. Nat.* 2, 858, 192. *Gmel. ed. Syst. Nat.* i. 5, 2578, 192.
Noctua litura, *Wien. Verz.* 77, 2. *Fabr. Sp. Ins.* ii. 236, 131; *Mant. Ins.* ii. 175, 262; *Ent. Syst.* iii. 2, 326. *Esp. Schmett.* iv. pl. 177, f. 5. *Bork. Schmett. Eur.* iv. 525, 211. *Hübn. Eur. Schmett. Noct.* pl. 27, f. 127. *Haw. Lep. Brit.* 210. *Dup. Hist. Nat. Lép. Fr.* iv. pl. 79, f. 6.
Orthosia litura, *Treit. Schmett.* v. 242, 18. *Boisd. Ind. Méth.* 140, 1124. *Steph. Ill. Brit Ent. Haust.* ii. 145. *Westw. & H. Brit. Moths*, i. 138, pl. 28, f. 4. *Herr.-Schæff. Schmett. Eur.* ii. 199, 53.
Noctua polluta, *Esp. Schmett.* iv. pl. 137, f. 5.
Amathes litura, *Hübn. Verz. Schmett.* 222, 2219.
Noctua (Orthosia) litura, *Meig. Syst. Besch.* iii. 117, 62, pl. 98, f. 3.
Anchocelis litura, *Guen. Noct.* i. 368, 614.
Noctua ornatrix, *Hübn. Eur. Schmett. Noct.* f. 813. *Frey. Beit.* i. pl. 95, f. 1.

a—n. England. From Mr. Stephens' collection.
o—q. England.
r—u. Europe. From M. Becker's collection.

Genus 10. HYPOTRIX.

Corpus sat gracile. Proboscis mediocriter longa. Palpi breves, subascendentes; articulus 3us brevis, distinctus, crassus, obtusus. Antennæ vix ciliatæ, corporis dimidio paullo longiores. Thorax sat oblongus. Abdomen alas posticas fere dimidio superans. Pedes longiusculi, subpilosi; tibiæ posticæ calcaribus breviusculis. Alæ anticæ oblongæ, apud costam rectæ, apice acuminatæ, margine exteriore subobliquo; posticæ latæ. *Mas.*—Abdomen lateribus pilosissimis, subtus fasciculatum. *Fem.*—Abdomen brevius.

Hypotrix, *Guen. Noct.* i. 369.

Body rather slender. Proboscis of moderate length. Palpi slightly ascending, short; second joint with hairs closely applied; third joint short, but distinct, thick, obtuse. Antennæ hardly ciliated, a little more than half the length of the body. Thorax somewhat oblong. Abdomen extending for nearly half its length beyond the hind wings. Legs rather long, slightly pilose; hind tibiæ with short spurs. Fore wings oblong, straight in front, acu-

minated at the tips, slightly oblique along the exterior border; submarginal line well defined. Hind wings broad. *Male.*—Abdomen very pilose on each side, with tufts of hairs beneath. *Female.*—Abdomen shorter.

1. Hypotrix purpurigera.

Rubro-cinerascens; palpi recti; abdomen lateribus ventreque purpureo fasciculatis; alæ anticæ gutta basali nigra, orbiculari et reniformi bene determinatis, oblongis, subæqualibus, obliquis, postice approximatis, rufo-fuscis flavo marginatis, umbra mediana reniformem trajiciente, linea submarginali conspicua subundulata fusco-rufo marginata; posticæ nigro-cinereæ, ciliis pallidioribus, lunula discali subtus conspicua.

Hypotrix purpurigera, *Guén. Noct.* i. 369, 615.

Brazil.

2. Hypotrix flavigera.

Mas. *Pallide ochracea; abdomen nigricans pilis ochraceis, subtus nigro fasciculatum; alæ anticæ spatio marginali albocinereo, linea submarginali flava subrecta nigro marginata antice interrupta, lineis guttularibus subobsoletis, macula orbiculari nulla, reniformi flava nigro bipunctata; posticæ nigro-cinereæ, ciliis pallidis, subtus pallidæ, lunula lineaque nigricantibus.*

Hypotrix flavigera, *Guen. Noct.* i. 370, 616.

Brazil.

3. Hypotrix carneigera.

Mas. *Roseo-cinerea, sericea; abdomen nigricans; alæ anticæ nitentes, valde acutæ, costa margineque interiore luteo lineatis, fasciis tribus vagis perobliquis olivaceo-viridibus, lineis transversis carneis subrectis subparallelis, maculis orbiculari et reniformi maximis olivaceis luteo marginatis, hac obliqua subinformi, margine exteriore ciliisque olivaceis, his roseo terminatis; posticæ albæ, subhyalinæ, margine venisque subcinerascentibus.*

Hypotrix carneigera, *Guen. Noct.* i. 370, 617.

Brazil.

Genus 11. ORTHODES.

Corpus sat robustum. Proboscis mediocriter longa. Palpi sæpissime validi, pilosi, ascendentes; articulus 3us in speciebus 1—4 brevis. Antennæ corporis dimidio longiores. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ breviusculæ; anticæ apud costam subrectæ, apice subangulatæ, margine exteriore vix obliquo. *Mas.*—Antennæ sæpissime simplices. Sexualia magna.

Orthodes, *Guen. Noct.* i. 371.

Body moderately stout. Proboscis moderately long. Palpi generally stout, pilose, ascending; third joint short in the typical species. Antennæ more than half the length of the body, generally simple in the male. Abdomen extending for about one-third of its length beyond the hind wings; apical appendages of the male large. Legs stout; hind tibiæ with long spurs. Wings rather short. Fore wings almost straight in front, somewhat angular at the tips, hardly oblique along the exterior border.

The North American species may be considered as the types of this genus; some of those from South America belong to distinct genera, and perhaps to the second group of *Noctuites*.

North America.

The four following may be all varieties of one species.

1. Orthodes cynica.

Fusca aut rufo-fusca; abdomen cinereum; alæ anticæ fasciis transversis undulatis indistinctis obscurioribus et pallidioribus, guttis exterioribus nigris, maculis orbiculari et reniformi subobsoletis; posticæ nigro-cinereæ, ciliis pallidis.

Orthodes cynica, *Guen. Noct.* i. 375, 627.

a. New York. Presented by E. Doubleday, Esq.
b—e. Nova Scotia. From Lieut. Redman's collection.

2. Orthodes nimia.

Fusca; abdomen subcervinum; alæ anticæ lineis transversis angulosis obscurioribus et pallidioribus, maculis orbiculari et reniformi subæqualibus albido marginatis; posticæ cinereæ.

Orthodes nimia, *Guen. Noct.* i. 376, 628.

a—c. New York. Presented by E. Doubleday, Esq.

3. Orthodes candens.

Rufo-fusca; abdomen subcervinum; alæ anticæ lineis transversis subobsoletis, guttis exterioribus nigris, maculis orbiculari et reniformi pallido marginatis, hac obliqua elliptica; posticæ cinereæ.

Orthodes candens, *Guen. Noct.* i. 376, 629.

a. New York. Presented by E. Doubleday, Esq.

4. Orthodes vecors.

Fusco-cervina; alæ anticæ lineis transversis distinctis pallidis ex parte fusco marginatis, guttis marginalibus nigricantibus, maculis orbiculari et reniformi fuscescentibus distinctis pallido marginatis; posticæ cervino-cinereæ.

Orthodes vecors, *Guen. Noct.* i. 376, 630.

a, b. New York. Presented by E. Doubleday, Esq.

South America.

5. Orthodes T-nigrum.

Fœm. *Ochraceo-cinerea; palpi articulo 2o fusco apice pallido; abdomen pilis nonnullis nigris, subtus punctis nigris bilineatum; alæ anticæ nigro conspersæ, striga discali apud venam medianam maculaque reniformi angusta nigris conjunctis, orbiculari punctiformi nigra, linea submarginali e lituris duabus nigricantibus, guttis marginalibus nigris; posticæ subobscuratæ, lunula discali punctisque marginalibus saturatioribus.*

Orthodes T-nigrum, *Guen. Noct.* i. 372, 618.

Brazil.

6. Orthodes? picta.

Ferruginea; alæ anticæ lineis transversis nigris, gutta discali alba, costa recta, apice angulatæ, margine exteriore denticulato, ciliis albidis nigro notatis; posticæ cinereæ, basi ciliisque albidis.

Phalæna-Noctua picta, *Anon. Ins. Surinam*, i. 99, pl. 46.

This species may form a new genus.

Surinam.

7. ORTHODES SATELLITIOIDES.

Palpi ascendentes, crassi, unicolores; pedes validi, tibiis villosis; alæ anticæ nigro-fuscæ violaceo velutinæ, linea subterminali e punctis flavis, macula reniformi e guttis duabus luteis, margine exteriore denticulato; posticæ nigro-cinereæ.

Orthodes satellitioides, *Guen. Noct.* i. 352, 619.
Orthodes picta, *var.?*

Brazil.

8. ORTHODES ANCATRA.

Argillaceo-rufa; pectus villosum; abdomen supra nigrum, subtus basi nigro fasciculatum; pedes villosi; alæ anticæ violaceo subtinctæ, costa obscuriore, lituris bene determinatis, maculis pallido marginatis; posticæ albæ, margine nigricante, venis nigris.

Orthodes ancatra, *Guen. Noct.* i. 372, 620.

Parà.

9. ORTHODES MELANOGASTER.

Abdomen supra nigricans, pilis lateralibus carneis; pedes ex parte carneo-refescentes; alæ anticæ cinereo-carneæ, conspersæ, nitentes, apice quadratæ, spatio pallidiore apud lineam arcuatam punctis albis nigrisque diviso, lineis bene determinatis maculis magnis pallido marginatis, ciliis flavo-viridibus, posticæ nigro-cinereæ, ciliis carneis.

Orthodes melanogaster, *Guen. Noct.* i. 373, 621.

Brazil.

10. ORTHODES ALBIMARGO.

Carneo-fusca, cinerascens; palpi valde robusti, caput superantes, oblique ascendentes; abdomen cinereo-carneum; pedes validi; alæ anticæ apice subrotundatæ, lineis distinctis, maculis magnis bene determinatis pallido marginatis; posticæ nigricantes, ciliis carneis.

Orthodes albimargo, *Guen. Noct.* i. 373, 622.

Brazil.

11. Orthodes Friburgensis.

Carneo-rufescens; palpi articulo 3o recto gracili, nudo, longiusculo; abdomen flavescens; alæ anticæ apud medium antice et postice saturatiores, lineis distinctis, maculis concoloribus magnis cinereo marginatis; posticæ carneo-cinereæ, margine ciliisque carneis.

Orthodes Friburgensis, *Guen. Noct.* i. 374, 623.

Brazil.

12. Orthodes ruber.

Pallide rufescens, subcarnea; palpi graciles, unicolores; alæ anticæ apud costam rectæ, apice subquadratæ, lineis duabus medianis vix distinctis, subterminali bene determinata, maculis parallelis subæqualibus nigro marginatis; posticæ sordide cinereæ, ciliis rufescentibus.

Orthodes ruber, *Guen. Noct.* i. 374, 624.

Brazil.

13. Orthodes curvirena.

Cinereo-fusca, subviolacea; palpi lateribus nigricantibus, articulo 3o longo; abdomen longum, subtus rufescens, pilis apicalibus fulvis; alæ anticæ lineis bene determinatis, maculis subcontiguis; posticæ nigricantes.

Orthodes curvirena, *Guen. Noct.* i. 374, 625.

Brazil.

14. Orthodes infirma.

Nigro-testacea; cinerascens; palpi valde arcuati, sat graciles, extus nigricantes; alæ anticæ lineis pallidioribus subroseis, subterminali ochracea, punctis apud lineam arcuatam albis nigrisque, maculis sat magnis roseo marginatis; posticæ albo-flavescentes margine subnigricante.

Orthodes infirma, *Guen. Noct.* i. 375, 626.

Brazil

Genus 12. CERASTIS.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, validi, breves, pilosi, caput non superantes; articulus 3us minimus. Antennæ corporis dimidio multo longiores. Abdomen latum, depressum, alas posticas plus minusve superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ breviusculæ, mediocriter latæ; anticæ apud costam rectæ, apice rectangulatæ, margine exteriore subconvexo vix obliquo. *Mas.*—Antennæ vix ciliatæ.

Cerastis, *Guen. Ann. Soc. Ent. Fr.* viii. 494; *Noct.* i. 377.
Cerastis, p., *Ochs.; Treits.; Boisd.; Dup.; Herr.-Schæff.*
Glæa, *Steph.; Westw.*
Orrhodia, *Hübn. Verz. Schmett.* 231; *Steph. Cat. Brit. Lep.*

Body stout. Proboscis moderately long. Palpi porrect, stout, short, pilose, not extending beyond the head; third joint very minute, much less than one-fourth of the length of the second. Antennæ much more than half the length of the body. Abdomen broad, flat, extending one-third or less beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings rather short, moderately broad. Fore wings straight in front, rectangular at the tips, slightly convex and hardly oblique along the exterior border. *Male.*—Antennæ hardly ciliated.

Europe.

A. Alæ anticæ testaceæ. - - - - - Buxi, *Boisd.*
B. Alæ anticæ rufescentes aut ferrugineæ.
  A. Alæ anticæ nigro non signatæ.
    A. Alæ posticæ flavo non late marginatæ.
      a. Maculæ discales non pallidæ.
        i. Alæ anticæ rufescentes. - - Vaccinii, *Linn.*
        ii. Alæ anticæ cinereo-ferrugineæ. spadicea, *Wien. Verz.*
      b. Maculæ discales pallidæ. - - Veronicæ, *Hübn.*
    B. Alæ posticæ flavo late marginatæ. - serotina, *Treit.*
  B. Alæ anticæ nigro signatæ.
    A. Alæ anticæ rubiginosæ. - erythrocephala, *Wien. Verz.*
    B. Alæ anticæ cinereo-ferrugineæ. - Silene, *Wien. Verz.*
C. Alæ anticæ cinereæ.
  A. Alæ anticæ fascia ferruginea. - mansueta, *Herr.-Schæff.*
  B. Alæ anticæ ferrugineo non fasciatæ. - intricata, *Boisd.*

1. Cerastis Buxi.

Pallide testacea; alæ anticæ punctis posterioribus, guttis costalibus, lineisque duobus exterioribus transversis guttularibus nigris; posticæ cinereæ, litura discali nigricante, ciliis albidis.

Cerastis Buxi, *Boisd. Ind. Méth.* 147, 1189. *Guen. Ann. Soc. Ent. Fr.* vi. 242; *Noct.* i. 378, 631. *Herr.-Schæff. Schmett. Eur.* ii. 322, 426, pl. 19, f. 92, 93.

Orthosia Daubei, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 331, pl. 30.

South France.

a—c. Europe. From M. Becker's collection.

2. Cerastis mansueta.

Cinerea; alæ anticæ ex parte obscuriores, lineis transversis undulatis strigisque costalibus nigris, guttis exterioribus costalibus et discalibus albis, fascia media ferruginea ciliis cervinis; posticæ nigro-cinereæ, ciliis pallidis.

Cerastis mansueta, *Herr.-Schæff. Schmett. Eur.* ii. 322, 428; ii. pl. 92, f. 472. *Guen. Noct.* i. 378, 632.

Coasts of the Sea of Marmora.

3. Cerastis intricata.

Cinerascens; alæ anticæ venis maculaque costali apicali albidis lituris costalibus nigricantibus, maculis orbiculari et reniformi glaucescentibus connexis albido marginatis; posticæ albidæ, fusco marginatæ.

Cerastis intricata, *Boisd. Ind. Méth.* 148, 1190. *Guen. Ann. Soc. Ent. Fr.* vi. 242; *Noct.* i. 379, 633. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 89, pl. 58, f. 2.

South France.

4. Cerastis Vaccinii.

Rufo-cervina; alæ anticæ lineis transversis fasciisque annulisque duobus discalibus cervinis ferrugineo marginatis, gutta discali fusca; posticæ cinereæ, ciliis rufescentibus.

Var. *Alæ anticæ glaucescente-cinereo suffusæ.*

Phalæna-Noctua Vaccinii, *Linn. Syst. Nat.* 832, 166; *Faun. Suec.* 1212. *Gmel. ed. Syst. Nat.* i. 5, 2535, 166.

Noctua Vaccinii, *Wien. Verz.* 85, 2. *Fabr. Mant. Ins.* ii. 139, 38; *Ent. Syst.* iii. 2, 23, 51. *Esp. Schmett.* iv. pl. 161, f. 1—6. *Bork. Eur. Schmett.* iv. 739, 333. *Haw. Lep. Brit.* 212. *Hübn. Eur. Schmett. Noct.* pl. 37, f. 177. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 79, f. 1.

Noctua læta? *Fabr. Ent. Syst.* iii. 2, 39.

Cerastis Vaccinii, *Treit. Schmett. Eur.* v. 401, 3. *Boisd. Ind. Méth.* 148, 1191. *Dup. Hist. Nat. Lép. Fr. Suppl. Orthosides*, pl. 2, f. 2. *Guen. Ann. Soc. Ent. Fr.* vi. 243; *Noct.* i. 379, 634. *Herr.-Schæff. Schmett. Eur.* ii. 322, 425, pl. 89, f. 459, *var.* Brigensis.

Orrhodia Vaccinii, *Hübn. Verz. Schmett.* 231, 2318. *Steph. Cat. Brit. Lep.* 79.

Noctua (Cerastis) Vaccinii, *Meig. Handb.* 172, 65; *Syst. Besch.* iii. 156, pl. 106, f. 6.

Glæa Vaccinii, *Steph. Ill. Brit. Ent. Haust.* ii. 161. *Westw. & H. Brit. Moths*, i. 148, pl. 30, f. 5, 6.

Noctua polita, *Wien. Verz.* 85.

Glæa polita, *Steph. Ill. Brit. Ent. Haust.* ii. 162.

Noctua spadicea, *Haw. Lep. Brit.* 233.

a, *b*. England. Presented by H. Doubleday, Esq.
c—*v*. England. From Mr. Stephens' collection.
u—*x*. England.
y—*bb*. Europe. From M. Becker's collection.

5. Cerastis spadicea.

Ferrugineo-cervina; alæ anticæ lineis transversis undulatis indistinctis fuscis, guttis submarginalibus lunulisque marginalibus nigricantibus, maculis orbiculari et reniformi pallido marginatis; posticæ nigro-cinereæ, ciliis cervinis.

Noctua spadicea, *Wien. Verz.* R. 6. *Hübn. Eur. Schmett. Noct.* f. 179. *Haw. Lep. Brit.* 214.

Cerastis spadicea, *Guen. Ann. Soc. Ent. Fr.* vi. 243; *Noct.* i. 380, 635. *Dup. Hist. Nat. Lép. Fr. Suppl. Orthosides*, pl. 2, f. 1.

Noctua Vaccinii, *var. Esp. Schmett.* iv. pl. 161, f. 3. *Dup. Hist. Nat. Lép. Fr.* pl. 79, f. 1. *Frey. Neu. Beit. Schmett.* i. pl. 46.

Orrhodia spadicea, *Hübn. Verz. Schmett.* 231, 2322.

Cerastis Vaccinii, *var. Treit. Schmett. Eur.* v. 403. *Boisd. Ind. Méth.* 148, 1191. *Herr.-Schæff. Schmett. Eur.* ii. 322.

Glæa spadicea, *Steph. Ill. Brit. Ent. Haust.* ii. 162.

Var. *Cinereo-cervina; abdomen cinereum; alæ anticæ guttis basalibus punctisque submarginalibus nigris, lineis nonnullis transversis undulatis fuscis, ocellis duabus discalibus cæsis ferrugineo marginatis; posticæ cinereæ, fasciis duabus subobsoletis nigricantibus, basi pallidiores.*

Noctua ligula, *Esp. Schmett.* pl. 166, f. 3.
Noctua subnigra, *Haw. Lep. Brit.* 215.
Cerastis dolosa, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 301, pl. 28, f. 1. *Herr.-Schæff. Schmett. Eur.* ii. 321, 423.
Cerastis spadicea, *var.* B. ligula, *Guen. Noct.* i. 381.
Glæa subnigra, *Steph. Ill. Brit. Ent. Haust.* ii. 162. *Curt. Brit. Ent.* vi. pl. 268.
Orrhodia ligula, *Steph. Cat. Brit. Lep.* 79.

a. England. Presented by J. C. Dale, Esq.
b, c. England. Presented by E. Doubleday, Esq.
d—t. England. From Mr. Stephens' collection.
v—y. England.
z—aa. Europe. From M. Becker's collection.

6. Cerastis Veronicæ.

Rufo-cervina; alæ anticæ maculis orbiculari et reniformi apud medium pallidis, intus flavo, extus ferrugineo marginatis; posticæ cinereæ, ciliis rufescentibus.

Noctua Veronicæ, *Hübn. Eur. Schmett. Noct.* f. 541.
Noctua cruda, *Hübn. Eur. Schmett. Noct.* f. 172.
Noctua pulverea? *Hübn. Eur. Schmett. Noct.* pl. 23, f. 169.
Noctua dolosa, *Hübn. Eur. Schmett. Noct.* f. 632.
Cerastis dolosa, *Treit. Schmett. Eur.* ii. 407; *Suppl.* x. 107. *Boisd. Ind. Méth.* 148, 1192. *Herr.-Schæff. Schmett. Eur.* ii. 321.
Cerastis Veronicæ, *Guen. Noct.* i. 382, 636.
Conistra Veronicæ, *Hübn. Verz. Schmett.* 229, 2298.
Agrochola dolosa, *Hübn. Verz. Schmett.* 229, 2301.
Orrhodia cruda, *Hübn. Verz. Schmett.* 231, 2323.
Cerastis neurodes, *Herr.-Schæff. Schmett. Eur.* ii. f. 568.

Hungary.

7. Cerastis erythrocephala.

Purpureo-rubiginea; caput et thorax anticus rufo-ferruginea; antennæ basi pallidæ; abdomen apice lateribusque ferrugineis; alæ anticæ ocellis duobus fasciaque marginali pallidioribus, litura discali nigra; posticæ nigro-cinereæ, ciliis pallidis.

——— ———, *Engr. Pap. d'Eur.* 507, b; 510, b.

Noctua erythrocephala, *Wien. Verz.* 77, 5. *Fabr. Ent. Syst.* iii. 2, 110, 331. *Bork. Eur. Schmett.* 215. *Hübn. Eur. Schmett. Noct.* f. 176.

Cerastis erythrocephala, *Treit. Schmett. Eur.* ii. 406. *Dup. Hist. Nat. Lép. Fr.* iii. 95, pl. 79. *Boisd. Ind. Méth.* 148, 1193. *Guen. Ann. Soc. Ent. Fr.* vi. 242; *Noct* i. 383, 637. *Herr.-Schæff. Schmett. Eur.* ii. 322, 424.

Orrhodia erythrocephala, *Hübn. Verz. Schmett.* 231, 2316.

Var. *Ferruginea; caput rufescens; alæ anticæ vix purpurascentes, ocellis duobus ferrugineis; exteriore nigro vario, fascia tenui exteriore guttulari fusca; posticæ nigricantes ciliis cinereis.*

——— ———, *Engr. Pap. d'Eur.* 510, a.

Noctua glabra, *Wien. Verz.* 114, 10. *Hübn. Eur. Schmett. Noct.* f. 438.

Noctua spadicea, *Bork. Eur. Schmett.* iv. 339.

Noctua Vaccinii, *var. Esp. Schmett.* pl. 162, f. 3, 4.

Cerastis glabra, *Treit. Schmett. Eur.* ii. 410; *Suppl.* x. 108.

Cerastis erythrocephala, *var.* A. glabra, *Guen. Noct.* i. 383.

Orrhodia glabra, *Hübn. Verz. Schmett.* 231, 2319.

a—m. Europe. From M. Becker's collection.

8. Cerastis Silene.

Cinereo-ferruginea; alæ anticæ venis pallidioribus, lineis transversis undulatis guttisque exterioribus indistinctis, orbiculari et reniformi nigro signatis, gutta interiore nigra; posticæ cinereæ, ciliis pallidis.

——— ———, *Engr. Pap. d'Eur.* 417, a, b.

Phalæna-Noctua Silene, *Gmel. ed. Syst. Nat.* i. 5, 2546, 1056.

Noctua Silene, *Wien. Verz.* 85, 1. *Fabr. Mant. Ins.* ii. 141, 57; *Ent. Syst.* iii. 2, 31, 74. *Hübn. Eur. Schmett. Noct.* pl. 37, f. 175. *Frey. Neu. Beit.* f. 426.

Bombyx Vau-punctatum, *Esp. Schmett.* iii. pl. 76, f. 4.

Noctua Vau-punctatum, *Bork. Eur. Schmett.* iv. 505, 201.

Noctua C-nigrum, *De Vill. Lin. Ent.* pl 5, f. 13.
Cerastis Silene, *Treit. Schmett. Eur.* v. 412, 7. *Dup. Hist. Nat. Lép. Fr.* vii. 102, pl. 79, f. 5. *Boisd. Ind. Méth.* 148, 1194. *Herr.-Schæff. Schmett. Eur.* ii. 321, 422.
Orrhodia Silene, *Hübn. Verz. Schmett.* 231, 2315.

a, *b*. Europe. From M. Becker's collection.

9. Cerastis serotina.

Ferruginea; abdominis segmenta flavo marginata; alæ anticæ lineæ undulata recta, basim versus obscurius adumbrata; posticæ flavo late marginatæ.

———— ————, *Engr. Pap. d, Eur.* 434, k.
Bombyx Fragariæ, *Esp. Schmett. Bomb.* pl. 86, f. 3.
Noctua domiduca, *Bork. Eur. Schmett.* iv. 44.
Noctua orbona, *Rossi, Faun. Etrusc.* ii. 391. *Hübn. Eur. Schmett. Noct.* 104, 604.
Cerastis serotina, *Treit. Schmett. Eur.* ii. 418. *Boisd. Ind. Méth.* 148, 1196. *Guen. Noct.* i. 385, 640. *Herr.-Schæff. Schmett. Eur.* ii. 321, 420.
Orbona serotina, *Hübn. Verz. Schmett.* 232, 2331.
Noctua serotina, *Frey. Neu. Beit.* f. 435.

East Europe.

a, *b*. Europe. From M. Becker's collection.

North America.

10. Cerastis anchocelioides.

Cinereo-ferruginea; alæ anticæ lineis transversis undulatis indistinctis nigricantibus, orbiculari et reniformi subobsoletis; posticæ cinereæ, ciliis pallidioribus.

Cerastis anchocelioides, *Guen. Noct.* i. 384, 639.

a—*f*. Trenton Falls, New York. Presented by E. Doubleday, Esq.

11. Cerastis? prodeuns.

Mas. *Rufo-cervina; palporum articulus 3us longiusculus; abdomen cinereum; alæ anticæ lineis transversis fuscescentibus subobsoletis, orbiculari obsoleta, reniformi indistincta albo notata; posticæ fuscescente-cinereæ, ciliis pallidis.*

Male. Reddish fawn-colour. Abdomen cinereous. Third joint of the palpi much longer than in the other species of the genus. Fore wings with the transverse lines brownish and very indistinct, especially the interior two; orbicular spot obsolete; reniform indistinct, but including a white spot. Hind wings brownish cinereous, with pale ciliæ. Length of the body 5 lines; of the wings 12 lines.

a. Nova Scotia. From Lieut. Redman's collection.

Australia.

12. Cerastis punctosa.

Fœm. *Cinerea; alæ anticæ fusco subconspersæ, guttis costalibus nigricantibus, lineis transversis fuscis guttularibus, orbiculari et reniformi e annulis duobus pallide cinereis, hac angusta, illa obliqua elliptica, ciliis purpurascentibus.*

Female. Cinereous. Fore wings minutely speckled with brown, with blackish dots along the costa, and with the usual transverse lines composed of brown dots; orbicular and reniform spots forming two pale cinereous ringlets, the former oblique-elliptical, rather small, the latter rather narrow; ciliæ purplish; under side with broad purplish borders, bounded on the inner side by a brown line. Length of the body 6 lines; of the wings 14 lines.

a. New Holland. Presented by Major-General Hardwicke.

Genus 13. EUPSILIA.

Corpus robustum. Proboscis brevis. Palpi breves, validi, pilosi, caput non superantes; articulus 3us minimus. Antennæ corporis dimidio valde longiores. Thorax cristatus. Abdomen latum, depressum, alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor breviusculis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rectangulatæ, margine exteriore denticulato convexo subobliquo. *Mas.*—Antennæ subciliatæ.

Eupsilia, *Hübn. Verz. Schmett.* 231.
Scopelosoma, *Curt. Brit. Ent.* 635; *Guen. Noct.* i. 385.
Micoptera, *Guen. Ann. Soc. Ent. Fr.* vi. 225; viii. 499.
Cerastis, p., *Ochs.; Treit.; Boisd.; Herr.-Schæff.*
Glæa, p., *Steph.*

Body stout. Proboscis short. Palpi short, stout, pilose, not extending beyond the head; third joint very minute. Antennæ much more than half the length of the body. Thorax crested. Abdomen broad, flat, extending for one-third of its length beyond

the hind wings. Legs stout; hind tibiæ with four rather short spurs. Wings moderately broad. Fore wings straight in front, nearly rectangular at the tips, denticulated convex and slightly oblique along the exterior border. *Male.*—Antennæ very minutely ciliated.

Europe.

1. Eupsilia satellitia.

Rufo-ferruginea; abdomen rufo-cinereum; alæ anticæ lineis transversis rectis et undulatis obscurioribus; alæ anticæ gutta punctisque duabus contiguis discalibus albis; posticæ cineræ.

——— ———, *Engr. Pap. d'Eur.* 511, a, b, c. *Röes. Ins Bel.* iii. pl. 50, f. 1—4.

Phalæna-Noctua satellitia, *Gmel. ed. Syst. Nat.* i. 5, 2573, 176.

Noctua satellitia, *Wien. Verz.* 86, 5. *Fabr. Sp. Ins.* ii. 230, 104; *Mant. Ins.* ii. 165, 205; *Ent. Syst.* iii. 87, 256. *Esp. Schmett.* iv. pl. 169, f. 6—10. *Bork. Eur. Schmett.* iv. 736, 333. *Hübn. Samml. Eur. Schmett.* pl. 38, f. 182. *Donov. Nat. Hist. Brit. Ins.* v. pl. 168. *Haw. Lep. Brit.* 201.

Noctua transversa, *Hufn. Berl. Mag.* iv. 418.

Cerastis satellitia, *Treit. Schmett. Eur.* v. 414, 8. *Dup. Hist. Nat. Lép. Fr.* vii. 116, pl. 80, f. 4. *Boisd. Ind. Méth.* 148, 1195. *Herr.-Schæff. Schmett. Eur.* ii. 321, 421.

Glæa satellitia, *Steph. Ill. Brit. Ent. Haust.* ii. 163.

Scopelosoma satellitia, *Curt. Brit. Ent.* 635. *Guen. Noct.* i. 386, 641.

Mecoptera satellitia, *Guen. Ann. Soc. Ent. Fr.* 243.

Noctua (Cerastis) satellitia, *Meig. Handb.* 172, 64; *Syst. Besch.* iii. 156, 137, pl. 106, f. 5.

Eupsilia satellitia, *Hübn. Verz. Schmett.* 231, 2324.

a. England. Presented by J. C. Dale, Esq.
b—f. England. Presented by H. Doubleday, Esq.
g—x.
y, z. Europe. From M. Becker's collection.

North America.

2. Eupsilia sidus.

E. satellitiæ *simillima; alæ anticæ latiores, breviores, plus unicolores, dentibus magis rotundatis, costa convexiore, margine exteriore minus rotundata, interioris basi plus arcuata, lineis —i— distinctis.*

Scopelosoma sidus, *Guen. Noct.* i. 386, 642.
North America.

Genus 14. LASYCAMPA.

Corpus robustum. Caput cristatum. Proboscis mediocriter longa. Palpi porrecti, pilosissimi, caput paullo superantes; articulus 2us 3o longi-conico triplo longior. Antennæ corporis dimidio multo longiores. Thorax subcristatus. Abdomen depressum, alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor breviusculis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rectangulatæ, margine exteriore subconvexo mediocriter obliquo. *Mas.*—Antennæ vix ciliatæ.

Dasycampa, *Guen. Ann. Soc. Ent. Fr.* vi. 224; viii. 497; *Noct.* i.
Orrhodia, p., *Hübn. Verz. Schmett.* 231.
Cerastis, p., *Ochs.; Treits.; Boisd.; Steph.*
Omalosoma, *Duponch.*

Body stout. Head crested. Proboscis moderately long. Palpi porrect, very pilose, extending a little beyond the head; third joint elongate-conical, about one-third of the length of the second. Antennæ much more than half the length of the body. Thorax slightly crested. Abdomen flat, extending a little beyond the hind wings. Legs stout; hind tibiæ with four rather short spurs. Wings moderately broad. Fore wings straight in front, rectangular at the tips, slightly convex and moderately oblique along the exterior border. *Male.*—Antennæ hardly ciliated.

1. Dasycampa rubiginea.

Ferrugineo-fulva; antennæ nigræ; abdominis discus fuscus; alæ anticæ lineis transversis denticulatis fuscis, macula discali guttisque plurimis nigris; posticæ nigricantes, ciliis fulvis.

——— ———, *Engr. Pap. d'Eur.* 512, a—d.
Phalæna-Noctua rubiginea, *Gmel. ed. Syst. Nat.* i. 5, 2546, 1054.
Noctua rubiginea, *Wien. Verz.* 86, 8. *Fabr. Mant. Ins.* ii. 142, 59; *Ent. Syst.* iii. 31, 76. *Bork. Eur. Schmett.* iv. 750, 340. *Hübn. Samml. Eur. Schmett. Noct.* pl. 38, f. 183. *Haw. Lep. Brit.* 204. *Dup. Hist. Nat. Lép. Fr.* vii. 137, pl. 109, f. 6. *Frey. Neu. Beit. Schmett.* i. pl. 45.

Dasycampa rubiginea, *Boisd. Ind. Méth.* 147, 1188. *Herr.-Schaff. Schmett. Eur.* ii. 322, 427. *Guen. Ann. Soc. Ent. Fr.* vi. 243; *Noct.* i. 387, 643.
Noctua (Xanthia) rubiginea, *Meig. Handb.* 171, 62; *Syst. Besch.* iii. 164, 154, pl. 108, f. 1.
Orrhodia rubiginea, *Hübn. Verz. Schmett.* 231, 2317.
Noctua tigerina, *Esp. Schmett.* iv. pl. 123, f. 4.
Noctua sulphurago? *Bork. Eur. Schmett.* iv. 679, 293.
Cerastis rubiginea, *Treit. Schmett. Eur.* 398, 2. *Steph. Ill. Brit. Ent. Haust.* ii. 161.
Omalosoma rubiginea, *Dup. Hist. Nat. Lép. Fr.* vii. *Orthosidæ*, pl. 1, f. 2.

a. England. From Mr. Stephens' collection.
b. England.
c—f. Europe. From M. Becker's collection.

Genus 15. HOPORINA.

Corpus mediocriter robustum. Caput antice conicum. Proboscis breviuscula. Palpi crassi, pilosi, vix ascendentes. Caput longe superantes; articulus 2us 3o conico quadruplo longior. Antennæ simplices, corporis dimidio valde longiores. Thorax cristatus. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus quatuor brevisculis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rectangulatæ, margine exteriore recto vix obliquo.

Hoporina, *Boisd. Ind. Méth.* 147; *Dup. Cat.*; *Herr.-Schaff.*; *Guen. Noct.* i. 388.
Xanthia, p., *Ochs.*; *Treit.*; *Steph.*; *Guen.*; *Dup.*
Jodia, p., *Hübn. Verz. Schmett.* 234.
Xantholeuca, *Steph.*

Body moderately stout. Head conical in front. Proboscis rather short. Palpi pilose, hardly ascending, very stout, extending far beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ simple, much more than half the length of the body. Thorax crested. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four rather short spurs. Wings moderately broad. Fore wings straight in front, rectangular at the tips, straight and hardly oblique along most of the exterior border.

1. HOPORINA CROCEAGO.

Ochracea; abdomen albidum; alæ anticæ lineolis costalibus albis, annulis duobus testaceis, lineis tribus obliquis cinereis; posticæ albidæ, gutta lineaque discalibus cinereis.

——— ———, *Albin, Nat. Hist. Engl. Ins.* pl. 15, 22.

Phalæna-Noctua croceago, *Gmel. ed. Syst. Nat.* i. 5, 2578, 1189. *Engr. Pap. d'Eur.* 518, a—c.

Noctua croceago, *Wien. Verz.* 86, 2. *Fabr. Mant. Ins.* ii. 159, 163; *Ent. Syst.* iii. 2, 73, 209. *Bork. Eur. Schmett.* iv. 665, 285. *Hübn. Samml. Eur. Schmett.* pl. 40, f. 189. *Haw. Lep. Brit.* 227.

Noctua fulvago, *Hübn. Beit. Ges. Schmett.* pl. 1, f. F. *Esp. Schmett.* pl. 176, f. 3, 4.

Noctua aurantiago, *Donov. Nat. Hist. Brit. Ins.* v. pl. 150.

Hoporina croceago, *Boisd. Ind. Méth.* 147, 1187. *Herr.-Schæff. Schmett. Eur.* ii. 320, 419. *Guen. Noct.* i. 389, 644. *Stainton, Man.* 251.

Xanthia croceago, *Treit. Schmett.* v. 360, 11. *Dup. Hist. Nat. Lép. Fr. Suppl.* vii. *Orthosides*, pl. 1, f. 1.

Noctua (Xanthia) croceago, *Meig. Syst. Besch.* iii. 161, 146, pl. 107, f. 3.

Jodia croceago, *Hübn. Verz. Schmett.* 234, 2342.

Xantholeuca croceago, *Steph. Ill. Brit. Ent. Haust.* iii. 67. *Westw. & H. Brit. Moths*, i. 211, pl. 45, f. 9, 10.

a—h. England. From Mr. Stephens' collection.
i—k. England.
l—n. Europe. From M. Becker's collection.
o. Europe. From Mr. Milne's collection.
p, q. Europe.

Genus 16. XANTHIA.

Corpus vix robustum. Caput antice subconicum. Proboscis mediocriter longa. Palpi graciles, porrecti, caput sat superantes; articulus 3us cylindricus, 2i dimidio vix brevior. Antennæ sat validæ, corporis dimidio longiores. Abdomen sat gracile. Pedes validi; tibiæ posticæ calcaribus quatuor abbreviatis. Alæ mediocriter latæ; anticæ sæpissime flavæ aut ochraceæ, apud costam subrectæ, apice rectangulatæ, margine exteriore subobliquo, plus minusve undulato. *Mas.*—Antennæ ciliatæ. Abdomen alas posticas paullo superans. *Fœm.*—Abdomen alas posticas non superans.

Xanthia, *Guen. Ann. Soc. Ent. Fr.* viii. 490; *Noct.* i. 389.
Xanthia, p., *Ochs. Treit. Boisd. Dup. Steph.*
Jodia, Cirrhia, Citria, Ochria, Mellinia, Orthosia, p., Atypha et Sideridis, *Hübn.*
Orthosia, p., *Steph.*
Xanthia, Orthosia, p., et Caradrina, p., *Herr.-Schæff.*

Body hardly stout. Head slightly conical in front. Proboscis moderately long. Palpi slender, porrect, extending some distance beyond the head; third joint cylindrical, nearly half the length of the second. Antennæ rather stout, more than half the length of the body. Abdomen rather slender. Legs stout; hind tibiæ with four short spurs. Wings moderately broad. Fore wings mostly yellow or orange, nearly straight in front, rectangular at the tips, slightly oblique and more or less undulating along the exterior border. *Male.*—Antennæ ciliated. Abdomen extending a little beyond the hind wings. *Female.*—Abdomen not extending beyond the hind wings.

Europe.

A. Alæ anticæ lineis transversis.
  A. Alæ anticæ ochraceæ aut pallidæ.
    A. Alæ anticæ albo non notatæ.
      a. Alæ anticæ linea nulla undulata. - citrago, *Linn.*
      b. Alæ anticæ linea undulata. - sulphurago, *Wien. Verz.*
    B. Alæ anticæ albo notatæ. - - - ocellaris, *Bork.*
  B. Alæ anticæ cervinæ.
    A. Alæ anticæ macula nulla nigricante. - evidens, *Treit.*
    B. Alæ anticæ macula nigricante. - - pulmonaris, *Esp.*
B. Alæ anticæ fasciis latis diffusis.
  A. Alæ anticæ flavæ. - - - - Cerago, *Wien. Verz.*
  B. Alæ anticæ luteæ.
    A. Alæ anticæ fascia nulla marginali. - - Silago, *Hübn.*
    B. Alæ anticæ fascia lata marginali. - aurago, *Wien. Verz.*
  C. Alæ anticæ cervinæ.
    A. Alæ posticæ linea nulla. - - - - gilvago, *Esp.*
    B. Alæ posticæ linea fusca. - - - evidens, *Hübn.*

1. Xanthia citrago.

Lutea; abdomen testaceo-albidum; alæ anticæ cervino conspersæ, lineis quatuor transversis obliquis saturatioribus, 1a et 2a undulatis, 3a et 4a subrectis; posticæ testaceo-albidæ.

——— ———, *Albin, Ins.* pl. 33. *Wilk. Pap.* 5, pl. 1, a. 8. *Deg. Ins.* ii. 429, pl. 7, f. 25. *Engr. Pap. d'Eur.* 527, a—c.
Phalæna-Noctua citrago, *Linn. Faun. Suec.* 1174. *Gmel. ed. Syst. Nat.* i. 5, 2577, 189.
Noctua citrago, *Wien. Verz.* 86, 3. *Fabr. Sp. Ins.* ii. 226, 88; *Mant. Ins.* ii. 160, 168; *Ent. Syst.* iii. 2, 75, 215. *Esp. Schmett.* iv. pl. 175, f. 5, 6. *Sepp. Ins.* iii. pl. 48. *Bork. Eur. Schmett.* iv. 667, 286. *Hübn. Samml. Eur. Schmett. Noct.* pl. 39, f. 188. *Haw. Lep. Brit.* 226. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 128, f. 2, 3. *Frey. Beit.* iv. pl. 376.
Xanthia citrago, *Treit. Schmett.* v. 357, 10. *Boisd. Ind. Méth.* 146, 1186. *Steph. Ill. Brit. Ent. Haust.* iii. 66. *Guen. Noct.* i. 392, 645. *Stainton, Man.* 252.
Noctua (Xanthia) citrago, *Meig. Syst. Besch.* iii. 2, 160, 145, pl. 107, f. 12.
Cirrhia citrago, *Hübn. Verz. Schmett.* 234, 2343.

a—e. England. Presented by O. Reilly, Esq.
f—p. England. From Mr. Stephens' collection.
q, r. Europe. From M. Becker's collection.

2. Xanthia sulphurago.

Pallide lutescens; abdomen testaceum; alæ anticæ fascia tenui media undulata auriculaque discali nigricantibus lineis transversis sæpissime guttularibus fuscis; posticæ albidæ.

Phalæna-Noctua sulphurago, *Gmel. ed. Syst. Nat.* i. 5, 2578, 1187.
Noctua sulphurago, *Wien. Verz.* 86, 8. *Fabr. Mant. Ins.* ii. 159, 165; *Ent. Syst.* iii. 74, 212. *Bork. Eur. Schmett.* iv. 293? *Thunb. Diss. Ent.* 54. *Hübn. Eur. Schmett. Noct.* pl. 41, f. 194. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 128, f. 5.
Noctua ochrago, *Esp. Schmett.* iv. pl. 177, f. 1.
Noctua fulvago, *Esp. Schmett.* 678. *Bork. Eur. Schmett.* iv. 664, 284.
Xanthia sulphurago, *Treit. Schmett.* v. 365, 13. *Boisd. Ind. Méth.* 146, 1184. *Guen. Noct.* i. 392, 647. *Herr.-Schæff. Schmett. Eur.* ii. 218, 111.
Cirrhia fulvago, *Hübn. Verz. Schmett.* 234, 2344.
Noctua (Xanthia) sulphurago, *Meig. Syst. Besch.* iii. 164, 153, pl. 107, f. 13.

a—c. Europe. From M. Becker's collection.

3. Xanthia Cerago.

Flava; palpi, antennæ pedesque supra subrosea; abdomen testaceum; alæ anticæ luteo obsolete variæ, annulo parvo discali punctoque subapicali nigris; posticæ albæ.

——— ———, *Engr. Pap. d'Eur.* 522, a—c.
Phalæna-Noctua gilvago, *Gmel. ed. Syst. Nat.* i. 5, 2577, 1181.
Phalæna-Noctua Cerago, *Gmel. ed. Syst. Nat.* i. 5, 2577, 1186.
Noctua flavescens, *Esp. Schmett.* iv. pl. 122, f. 2. *Bork. Eur. Schmett.* iv 684, 297.
Noctua gilvago, *Wien. Verz.* 87, 10. *Fabr. Mant.* ii. 161, 172; *Ent. Syst.* iii. 2, 76, 219.
Noctua Cerago, *Wien. Verz.* 86, 9. *Fabr. Ent. Syst.* iii. 2, 75, 213; *Bork. Eur. Schmett.* iv. 68, 294. *Hübn. Samml. Eur. Schmett. Noct.* f. 445. *Scriba, Beit. Ins. Ges.* 141, pl. 10, f. 1. *Haw. Lep. Brit.* 222. *Dup. Hist. Nat. Lép. Fr.* viii. pl. 129, f. 1, 2
Xanthia gilvago, *Steph. Ill. Brit. Ent. Haust.* iii. 65.
Xanthia Cerago, *Treit. Schmett.* v. 370, 15. *Steph. Ill. Brit. Ent. Haust.* iii. 64. *Boisd. Ind. Méth.* 146, 1182. *Guen. Noct.* i. 393, 648. *Herr.-Schæff. Schmett. Eur.* ii. 217, 109. *Stainton, Man.* 252.
Noctua (Xanthia) Cerago, *Meig. Handb.* 170, 58, pl. 13, f. 8; *Syst. Besch.* iii. 162, 149, pl. 107, f. 8.
Citria Cerago, *Hübn. Verz. Schmett.* 234, 2345.

a. England. From Mr. Carter's collection.
b—f. England. From Mr. Stephens' collection.
g—j. Europe. From M. Becker's collection.

4. Xanthia Silago.

Lutea; caput ferrugineum; thorax fascia antica ferruginea fusco marginata, fasciculis posticis albidis; alæ anticæ guttis nonnullis, maculis costalibus fasciaque exteriore ferrugineis; posticæ luteo-albidæ, linea discali fuscescente.

——— ———, *Engr. Pap. d'Eur.* 524, a—c.
Phalæna-Noctua flavago, *Gmel. ed. Syst. Nat.* i. 5, 2577, 1182.
Noctua flavago, *Fabr. Mant. Ins.* ii. 160, 171; *Ent. Syst.* iii. 2, 76, 218. *Scriba, Beit. Ins. Gesch.* 142, pl. 10, f. 2. *Haw. Lep. Brit.* 220.
Noctua togata, *Esp. Schmett.* iv. pl. 124, f. 1.
Noctua ochreago, *Bork. Eur. Schmett.* iv. 671, 288.
Noctua citrago, *Wilk.* pl. 8.

Noctua rubago, *Donov. Nat. Hist. Brit. Ins.* x. pl. 338.
Noctua (Xanthia) Silago, *Meig. Handb.* 170, 57, pl. 13, f. 7; *Syst. Besch.* iii. 162, 148, pl. 107, f. 5.
Xanthia flavago, *Steph. Ill. Brit. Ent. Haust.* iii. 64. *Stainton, Man.* 252.
Noctua Silago, *Hübn. Eur. Schmett. Noct.* pl. 40, f. 191. *Dup. Hist. Nat. Lép. Fr.* iv. 462, pl. 120. *Frey. Beit.* ii. pl. 135.
Citria Silago, *Hübn. Verz. Schmett.* 234, 2346.
Xanthia Silago, *Treit. Schmett.* v. 367, 14. *Boisd. Ind. Méth.* 146, 1181. *Guen. Noct.* i. 394, 649. *Herr.-Schæff. Schmett. Eur.* ii. 217, 110.

a—u. England. From Mr. Stephens' collection.
v—z. England.
aa—dd. Europe. From M. Becker's collection.
ee. Germany.
ff—ii. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

5. Xanthia aurago.

Lutea aut crocea; alæ anticæ croceæ, fascia media latissima maculoque apicali croceis aut luteis croceo conspersis; posticæ albido-testaceæ.

———, *Engr. Pap. d'Eur.* 520, a—c; 521, a—d.
Phalæna-Noctua aurago, *Gmel. ed. Syst. Nat.* i. 5, 2578, 1188.
Noctua aurago, *Wien. Verz.* 86, 7. *Fabr. Mant. Ins.* ii. 159, 164; *Ent. Syst.* iii. 2, 74, 211. *Bork. Eur. Schmett.* iv. 675, 291. *Hübn. Samml. Eur. Schmett. Noct.* pl. 41, f. 196, 197. *Haw. Lep. Brit.* 218. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 128, f. 4.
Noctua prætexta, *Esp. Schmett.* iv. pl. 124, f. 2.
Noctua rutilago, *Bork. Eur. Schmett.* iv. 290. *Hübn. Beit. Ges. Schmett.* pl. 2, 4.
Noctua fucata, *Esp. Schmett.* 243, 2338.
Ochria aurago, *Hübn. Verz. Schmett.* pl. 124, f. 3, 4.
Xanthia aurago, *Treit. Schmett.* v. 363, 12. *Steph. Ill. Brit. Ent. Haust.* iii. 65. *Boisd. Ind. Méth.* 146, 1180. *Guen. Noct.* i. 394, 650. *Herr.-Schæff. Schmett. Eur.* ii. 216, 107. *Stainton, Man.* 252.
Noctua (Xanthia) aurago, *Meig. Syst. Besch.* iii. 161, 147, pl. 107, f. 4.

a—h. England. From Mr. Stephens' collection.
i, j. England.
k, l. Europe. From M. Becker's collection.

6. Xanthia gilvago.

Cervina; alæ anticæ strigulis transversis subobsoletis obscurioribus, gutta discali cinerea, punctis exterioribus nigris; posticæ albido-testaceæ. Mas.—*Abdomen cervinum; alæ anticæ plagis indistinctis cinereis, punctis ciliaribus nigricantibus.* Fœm.—*Abdomen albido-testaceum.*

——— ———, *Engr. Pap. d'Eur.* 525, a—c.

Noctua gilvago, *Esp. Schmett.* pl. 176, f. 2. *Hübn. Samml. Eur. Schmett.* f. 443. *Dup. Hist. Nat. Lép. Fr.* iv. 465, pl. 129, f. 4, 5.

Xanthia gilvago, *Boisd. Ind. Méth.* 1183. *Guen Noct.* i. 395, 652. *Herr.-Schæff. Schmett. Eur.* ii. 217, 109. *Stainton, Man.* 253.

Noctua palleago, *Hübn. Eur. Schmett. Noct.* f. 442. *Dup. Hist. Nat. Lep. Fr.* vii. 468, pl. 130, f. 1.

Xanthia palleago, *Treit. Schmett.* v. 377.

Mellinia gilvago, *Hübn. Verz. Schmett.* 235, 2348.

a—g. Europé. From M. Becker's collection.

7. Xanthia ocellaris.

Mas. *Ochracea; abdomen pallidum; alæ anticæ lineis transversis undulatis basalibus et macularum marginibus obscurioribus, guttis exterioribus nigricantibus, reniformi postice albo signata; posticæ citrinæ, margine lutescente.* Fœm.—*Testaceæ; alæ anticæ fasciis annuloque postico distinctis; posticæ albæ.*

——— ———, *Engr. Pap. d'Eur.* 523, e.

Noctua ocellaris, *Bork. Eur. Schmett.* iv. 273.

Noctua palleago, *Hübn. Eur. Schmett. Noct.* f. 192, 442.

Xanthia gilvago, *Treit. Schmett. Eur.* ii. 373. *Eversm. Faun. Volg-Ural.* 278.

Xanthia ocellaris, *Guen. Noct.* i. 396, 653.

Mellinia palliago, *Hübn. Verz. Schmett.* 235, 2347.

Europe.

8. Xanthia ferruginea.

Rufo-cervina; antennæ testaceæ; abdomen rufescens; alæ anticæ ocellis duobus lineisque transversis undulatis testaceis, his fusco marginatis, fasciis duabus subobsoletis ferrugineis; posticæ cinereæ, marginibus pallide rufescentibus.

——— ———, *Engr. Pap. d'Eur.* 408, a—c.
Noctua ferruginea, *Wien. Verz.* 86, 7. *Hübn. Samml. Eur. Schmett. Noct.* pl. 38, f. 181. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 130, f. 2. *Frey. Beit.* pl. 123.
Bombyx fuscago, *Esp. Schmett.* iii. pl. 75, f. 5.
Noctua circellaris, *Naturf.* ix. 134. *Bork. Eur. Schmett.* iv. 669, 287.
Noctua undosa, *Bork. Eur. Schmett.* iv. 753, 342.
Noctua undata, *View. Verz. Schmett.* 17, pl. 1, f. 2.
Noctua macilenta, *Hübn. Eur. Schmett. Noct.* f. 688, 689.
Xanthia ferruginea, *Treit. Schmett.* v. 349. *Boisd. Ind. Méth.* 145, 1174. *Guen. Noct.* i. 397, 656. *Stainton, Man.* 253.
Orthosia macilenta, *Hübn. Verz. Schmett.* 229, 2294. *Steph. Ill. Brit. Ent. Haust.* iii. 148. *Herr.-Schæff. Schmett. Eur.* ii. 205, 78. *Stainton, Man.* 246.
Noctua (Xanthia) ferruginea, *Meig. Syst. Besch.* iii. 158, 140, pl. 107, f. 2.

a—k. England. From Mr. Stephens' collection.
l. Scotland. From Mr. Foxcroft's collection.
m. n. England.
o—s. Europe. From M. Becker's collection.

9. Xanthia pulmonaris.

Cervina; abdomen cinereum, basi canum; alæ anticæ lineis nonnullis transversis undulatis fuscescentibus, macula discali nigricante; posticæ cinereæ, basi reallidiores.

Noctua pulmonaris, *Esp. Schmett.* iv. pl. 151, f. 5. *Hübn. Samml. Eur. Schmett. Texte. Frey. Neu. Beit. Schmett.* iii. pl. 215.
Noctua Pulmonariæ, *Hübn. Samml. Eur. Schmett. Noct.* f. 98.
Noctua ochreago, *Fabr. Suppl.* 218, 219.
Noctua fuscago, *Esp. Schmett.* pl. 176, f. 5, 6.
Atypha pulmonaris, *Hübn. Verz. Schmett.* 213, 2129.
Xanthia pulmonaris, *Treit. Schmett. Eur.* ii. 342. *Boisd. Ind. Méth.* 145, 1175. *Guen. Noct.* i. 398, 657.
Caradrina pulmonaris, *Herr.-Schæff. Schmett. Eur.* ii. 213, 101.

a—d. Europe. From M. Becker's collection.

10. Xanthia evidens.

Sordide cervina; alæ anticæ fasciis undulatis rectisque et macularum marginibus fuscis; posticæ albidæ, linea fusca, margine cinereo.

Noctua evidens, *Hübn. Samml. Eur. Schmett. Noct.* f. 369.
Xanthia evidens, *Treit. Schmett.* v. 351, 6. *Dup. Hist. Nat. Lép. Fr.* vii. 457, pl. 128, f. 6; *Suppl.* iii. 442, pl. 39. *Eversm. Faun. Volg-Ural.* 276. *Boisd. Ind. Méth.* 145, 1173.
Sideridis evidens, *Hübn. Verz. Schmett.* 232, 2326.
Noctua (Xanthia) evidens, *Meig. Syst. Beach.* iii. 157, 138, pl. 107, f. 16.
Xanthia? evidens, *Guen. Noct.* i. 399, 658.
Orthosia evidens, *Herr.-Schæff. Schmett. Eur.* ii. 203, 71.

Hungary. South Russia.

North America.

11. Xanthia rufago.

Ferruginea; abdomen et alæ posticæ cinerea; anticæ maculis duabus transversis discalibus lineolisque duabus subapicalibus, una recta, altera undulata, nigris.

Jodia rufago (Noctua genuina, Xanthia plana), *Hübn. Samml. Exot. Schmett.* i. 15, 31, f. 61, 62; *Verz. Schmett.* 234, 2341.
Xanthia rufago, *Guen. Noct.* i. 392, 646.

Georgia, Florida.

12. Xanthia aurantiago.

Rufa; abdomen testaceum; alæ anticæ lineis duabus transversis undulatis nigris, maculis obsoletis; posticæ testaceæ, margine lato rufo.

Xanthia aurantiago, *Guen. Noct.* i. 394, 651.

a. East Florida. Presented by E. Doubleday, Esq.

13. Xanthia bicolorago.

Lutescens; abdomen pallidum; alæ anticæ linea transversa undulata dimidioque exteriore cinereo-fuscis; posticæ cinereo-fuscæ, ciliis pallidis.

Xanthia bicolorago, *Guen. Noct.* i. 397, 655.

a. New York. Presented by E. Doubleday, Esq.

West Indies.

14. Xanthia viridescens.

Fœm. *Pallidissime viridis, subtus albida; palporum articulus 2us 3o conico quadruplo longior; antennæ fulvæ, simplices; abdomen testaceum, basi apicoque albidum; alæ anticæ fasciis tribus angustis obliquis guttisque exterioribus obscurioribus, orbiculari et reniformi marginibus obscurioribus; posticæ albæ.*

Female. Very pale green, whitish beneath. Third joint of the palpi conical, not more than one-fourth of the length of the second. Antennæ tawny, simple. Abdomen testaceous, whitish at the base and at the tip. Fore wings with three slender oblique darker green bands, and a row of exterior darker green dots; orbicular and reniform spots bordered with darker green, the former nearly round, hardly half the size of the latter. Hind wings white. Length of the body 6 lines; of the wings 14 lines.

a. St. Domingo. From Mr. Tweedie's collection.

South America.

15. Xanthia prasina.

Fœm. *Pallide viridis, subtus alba; antennæ rufescentes; abdomen pallidissime cervinum, basi lateribusque albis; pedes antici rufi; alæ anticæ fasciis quinque aut sex angustis obliquis obscurioribus, costa margineque exteriore rufescentibus, maculis obsoletis; posticæ albæ.*

Female. Pale green, white beneath. Antennæ reddish. Abdomen very pale fawn-colour, white on each side and at the base. Fore legs red. Fore wings with five or six slender oblique darker green bands, reddish along the costa and along the exterior border; spots obsolete. Hind wings white. Length of the body 6 lines; of the wings 14 lines.

This species much resembles *X. viridescens*, but may be distinguished by the head, which is green, not white, by the number and direction of the bands of the fore wings, by the red exterior border, and by the hind wings, which are wholly white, whereas in *X. viridescens* they are testaceous along the interior border and pale brown along the exterior one. Length of the body 6 lines; of he wings 14 lines.

a. Santarem, Brazil. From Mr. Bates' collection.

16. Xanthia pyraloides.

Mas. *Pallidissime viridis; antennæ albidæ, simplices, graciles, corporis dimidio non longiores; abdomen album, supra vix testaceum; alæ anticæ fasciis obliquis subobsoletis subobscurioribus; posticæ albæ.*

Male. Very pale green. Antennæ whitish, simple, slender, full half the length of the body. Abdomen white, with a slight testaceous tinge above. Fore wings with oblique almost obsolete slightly darker bands. Hind wings white, very iridescent. Length of the body 5½ lines; of the wings 11 lines.

a. Venezuela. From Mr. Dyson's collection.

17. Xanthia multifascia.

Mas. *Rosso-rufa; caput supra et thoracis latera pilis nonnullis albidis; palpi ascendentes; antennæ serratæ, corporis dimidio non longiores; abdomen album, alas posticas triente superans; alæ anticæ lineis tribus albis obliquis subundulatis, margine interiore ex parte flavo, plaga flavo rufo guttata apud costæ medium, gutta interiore macula orbiculari guttisque submarginalibus fuscis; posticæ albæ, valde iridescentes.*

Male. Rosy red. Palpi ascending. Head above and sides of the thorax with some white hairs. Antennæ serrated, about half the length of the body. Abdomen white, shining, extending for full one-third of its length beyond the hind wings. Fore wings with three white oblique slightly undulating lines, partly yellow along the interior border, and with a yellow red-dotted patch by the middle of the costa; a brown dot between the base of the wing and the orbicular spot, which is brown, nearly round, and rather small; reniform red, rather narrow, its fore part in the yellow patch; a row of brown dots near the exterior border. Hind wings white, very iridescent. Length of the body 7 lines; of the wings 14 lines.

a. Pará. From Mr. Bates' collection.

Africa.

18. Xanthia breviçornis.

Mas. *Pallide lutescens; palporum articulus 3us brevissimus; antennæ serratæ, corporis dimidio paullo breviores; abdomen testaceum; alæ anticæ flavæ, fasciis exterioribus diffusis viridi-fuscis albido interlineatis, reniformi viridi-fusca lunulam albidam includente; posticæ albidæ, gutta discali linea exteriore margineque fuscescentibus.*

Male. Dull pale luteous. Third joint of the palpi not more than one-sixth of the length of the second. Antennæ serrated, a little less than half the length of the body. Abdomen testaceous. Fore wings yellow, with greenish brown diffuse exterior bands, which are intersected by whitish shining transverse undulating lines; reniform spot greenish brown, enclosing a whitish shining lunule. Hind wings whitish, with a discal dot, an exterior line, and the border brownish. Length of the body 6 lines; of the wings 14 lines.

a. Congo. Presented by Sir J. Richardson.

Asia.

19. Xanthia imparata.

Fœm. *Pallidissime flava; antennæ fuscæ; abdomen alas posticas non superans, segmentis luteo fasciatis; alæ anticæ lineis transversis undulatis luteis lineisque exterioribus fuscescentibus, margine exteriore fuscescente guttis obscure fuscis, reniformi fusca subrotunda; posticæ albæ, marginibus pallide flavescentibus.*

Female. Very pale yellow. Antennæ brown. Abdomen not extending beyond the hind wings, with a slender luteous band on each segment. Fore wings with undulating transverse luteous lines, and with exterior brownish lines; exterior margin brownish, with a row of dark brown dots; claviform and orbicular spots obsolete; reniform brown, nearly round, rather large. Hind wings white, with pale yellow borders. Length of the body 5 lines; of the wings 12 lines.

a. North India.

20. Xanthia rufoflava.

Luteo-flava, subtus alba; abdomen supra testaceum; alæ anticæ apud marginem exteriorem ferrugineæ, lineis transversis 1*a*, 2*a* *et* 3*a* *indistinctis fuscescentibus subarcuatis,* 4*a* *nigricante angulata, macula orbiculari obsoleta, reniformi pallidissime rufa subrotunda marginata; posticæ supra rufescentes, marginibus ciliisque canis.*

Luteous-yellow, white beneath. Abdomen testaceous above. Fore wings ferruginous along the exterior border; first, second and third transverse lines brownish, indistinct, slightly curved; fourth

blackish, more distinct and somewhat zigzag, bordering the ferruginous part; orbicular spot obsolete; reniform spot very pale red, nearly round, with a darker border. Hind wings reddish above, with hoary borders and ciliæ. *Male.*—Antennæ ciliated. Abdomen extending for half its length beyond the hind wings. *Female.*—Abdomen extending very little beyond the hind wings. Length of the body 5½—7 lines; of the wings 14 lines.

a. North India. Presented by E. Doubleday, Esq.
b. North India. From Mr. Stevens' collection.

Country unknown.

21. Xanthia carneago.

Sordide carnea; thorax cristatus; antennæ basi albæ; alæ anticæ lineis medianis distinctis duplicatis sublunulatis nigricantibus, submarginali fere obsoleta, macula costali subapicali nigricante, maculis indistinctis, reniformi nigro conspurcata; posticæ albido-cinereæ, nigricante carneoque tinctæ.

Xanthia carneago, *Guen. Noct.* i. 397, 654.

22. Xanthia indirecta.

Rufo-fulva, subtus albida; abdomen supra pallide cinereum; alæ albidæ; anticæ rufo-fulvo conspersæ, lineis quatuor transversis distinctis, 1a, 2a et 3a subundulatis, 4a recta apud costam angulata, linea exteriore indistincta undulata lunulisque marginalibus; posticæ linea exteriore transversa.

Allied to *X. citrago.* Reddish tawny, whitish beneath. Abdomen pale cinereous above. Wings whitish. Fore wings thickly sprinkled with reddish tawny, and with the four lines distinct, and of the same hue; first, second and third lines slightly undulating; third traversing the reniform spot; fourth straight till it approaches the costa, where it is abruptly angular; an exterior indistinct undulating line, and a row of marginal lunules, each of which is most distinct in the middle. Hind wings with an exterior transverse line. Length of the body 6 lines; of the wings 15 lines.

a. ——— ? From Mr. Milne's collection.

Genus 17. XESTIA.

Corpus vix robustum. Proboscis sat longa. Palpi pilosi, ascendentes, sat longi; articulus 2us 3o cylindrico quadruplo longior. Antennæ corporis dimidio multo longiores. Abdomen alas posticas vix superans. Pedes validi, longiusculi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice acuminatæ, margine exteriore subconvexo mediocriter obliquo. *Mas.*—Antennæ subpectinatæ. *Fœm.*—Antennæ subciliatæ.

Hiptelia, *Guen. Noct.* i. 399.
Xestia, *Hübn. Exot. Schmett.* 232.
Xanthia, p., *Ochs.; Treit.; Dup.; Boisd.; Herr.-Schæff.; Guen. Ann. Soc. Ent.*

Body hardly stout. Proboscis somewhat long. Palpi pilose, ascending, rather long; third joint cylindrical, about one-fourth of the length of the second. Antennæ much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs stout, rather long; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight along the costa; tips acute; hind border slightly convex, moderately oblique. *Male.*—Antennæ slightly pectinated. *Female.*—Antennæ slightly ciliated.

Europe.

1. XESTIA OCHREAGO.

Testacea; alæ anticæ lineis transversis undulatis maculisque fuscis, reniformi nigro notata; posticæ cinerascentes, marginibus testaceis.

Noctua ochreago, *Hübn. Samml. Eur. Schmett. Noct.* pl. 92, f. 431.
Xanthia ochreago, *Dup. Hist. Nat. Lép. Fr.* vii. 284, pl. 117, f. 8.
Xanthia rubecula, *Treit. Schmett. Eur.* v. 353, 7; *Suppl.* 103. *Boisd. Ind. Méth.* 145, 1171. *Guen. Ann. Soc. Ent. Fr.* vi. 241. *Herr.-Schæff. Schmett. Eur.* ii. 70, pl. 85, f. 437, 438.
Hiptelia ochreago, *Guen. Noct.* i. 400, 659.
Noctua rubecula, *Frey. Neu. Beit. Schmett.* pl. 389.
Noctua (Xanthia) rubecula, *Meig. Syst. Besch.* iii. 158, 141, pl. 107, f. 9.
Xestia Ochrojois, *Hübn. Verz. Schmett.* 233, 2333.

South France. Italy.

a, *b*. Europe. From M. Becker's collection.

2. Xestia miniago.

Rufescente-ochracea; alæ anticæ strigis ambabus non dentatis lineaque undulata pallidioribus, maculis fusco repletis, orbiculari obliqua, punctis nigris venarum pone strigam posteriorem; posticæ albidæ.

Xanthia miniago, *Frey. Neu. Beit. Schmett.* iv. pl. 304. *Boisd. Ind. Méth.* 145, 1172. *Guen. Ann. Soc. Ent. Fr.* vi. 242. *Herr.-Schæff. Schmett. Eur.* ii. 201, 62, pl. 23, f. 113.
Hiptelia miniago, *Guen. Noct.* i. 401, 660.

South Russia.

North America.

3. Xestia chloropha.

Fœm. *Cervina; abdomen canum; alæ anticæ linea transversa subbasali, strigis discalibus fasciaque gemina subapicali fuscis; posticæ fasciis duabus fuscis, basi canis.*

Xestia chloropha (Noctua genuina, Gloia ferruginea), *Hübn. Samml. Exot. Schmett.* i. 16, 37, f. 73, 74; *Verz. Schmett.* 233, 2334.

Georgia, Florida.

Genus 18. CIRRŒDIA.

Corpus vix robustum. Caput conicum. Proboscis breviuscula. Palpi porrecti, caput vix superantes; articulus 3us minimus. Antennæ corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes mediocriter validi; tibiæ posticæ calcaribus vix longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice acuminatæ vix falcatæ, margine exteriore subundulato mediocriter obliquo. *Mas.*—Antennæ subsetosæ.

Cirrœdia, *Guen. Ann. Soc. Ent. Fr.* viii. 242, 489; *Noct.* i. 401; *Dup.*
Xanthia, p., *Treits.; Boisd.; Steph.; Curt.*
Atethmia, p., *Hübn. Verz. Schmett.* 238.

Body hardly stout. Head conical. Proboscis rather short. Palpi porrect, hardly extending beyond the head; third joint very minute, much less than one-fourth of the length of the second. Antennæ more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs moderately stout;

spurs of the hind tibiæ hardly long. Wings moderately broad. Fore wings straight in front, acuminated and very slightly falcate at the tips; exterior border slightly undulating, moderately oblique. *Male.*—Antennæ very slightly setose.

Europe.

1. Cirrœdia xerampelina.

Pallide lutea; alæ anticæ fascia media lata rufescente antice dilatata et lutea maculamque cervinam includente, margine exteriore rufescente; posticæ albidæ, margine rufescente.

Noctua xerampelina, *Hübn. Samml. Eur. Schmett. Noct.* pl. 90, f. 421. *Dup. Hist. Nat. Lép. Fr.* iv. 249, pl. 116, f. 1. *Frey. Neu. Beit. Schmett.* ii. pl. 149.

Noctua centrago, *Haw. Lep. Brit.* 219.

Xanthia xerampelina, *Treit. Schmett. Eur.* v. 354, 8; *Suppl.* 106. *Boisd. Ind. Méth.* 146, 1178.

Cirrœdia xerampelina, *Guen. Ann. Soc. Ent. Fr.* vi. 242; *Noct.* i. 402, 662. *Herr.-Schaff. Schmett. Eur.* ii. 225, 135. *Stainton, Man.* 254.

Xanthia centrago, *Curt. Brit. Ent.* 84. *Steph. Ill. Brit. Ent. Haust.* iii. 65.

Noctua (Xanthia) xerampelina, *Meig. Syst. Besch.* iii. 159, 142, pl. 107, f. 7.

Atethmia xerampelina, *Hübn. Verz. Schmett.* 238, 2366.

a—c. England. From Mr. Stephens' collection.
d. England.
e. Europe. From M. Becker's collection.

2. Cirrœdia ambusta.

Fusco-cervina; abdomen testaceum; alæ anticæ lineis duabus undulatis unaque e lunulis exterioribus transversis venisque exterioribus testaceis, reniformi magna, testaceo marginata; posticæ testaceæ, margine cervino.

——— ———, *Engr. Pap. d'Eur.* 500, a—c.

Noctua ambusta, *Wien. Verz.* T. 16. *Fabr. Ent. Syst.* iii. *Bork. Eur. Schmett.* iv. 276. *Hübn. Samml. Eur. Schmett. Noct.* f. 215. *Dup. Hist. Nat. Lép. Fr.* iv. 323, pl. 120. *Frey. Neu. Beit. Schmett.* ii. pl. 189.

Noctua xerampelina, *Esp. Schmett.* pl. 183, f. 5.

Xanthia ambusta, *Treit Schmett. Eur.* i. 78. *Boisd. Ind. Méth.* 146, 1177.
Cirrœdia ambusta, *Guen. Noct.* i. 403, 663. *Herr.-Schæff. Schmett. Eur.* ii. 225, 136.
Atethmia ambusta, *Hübn. Verz. Schmett.* 238, 2367.
a—d. Europe. From M. Becker's collection.

North America.

3. Cirrœdia pampina.

Rufo-lutea; alæ anticæ margine exteriore dentata angulato, lineis transversis ciliisque rufis, interiore et mediana antice remotis, exteriore diffusa angulosa, maculis magnis rufescentibus flavo marginatis, orbiculari subquadrata; posticæ rufescentes.

Cirrœdia pampina, *Guen. Noct.* i. 402, 661.

a. New York. Presented by E. Doubleday, Esq.
b, c. New York. From Mr. Milne's collection.
d, e. Nova Scotia. From Lieut. Redman's collection.

Genus 19. MESOGONA.

Corpus robustum. Caput conicum. Proboscis mediocriter longa. Palpi validi, porrecti, caput non superantes; articulus 3us conicus, 2i quadrante non longior. Antennæ simplices, corporis dimidio valde longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus vix longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rectangulatæ, margine exteriore antice vix obliquo postice rotundato.

Mesogona, *Boisd. Ind. Méth.* 144; *Dup.; Guen. Noct.* i. 403.
Mythimna, *Hübn. Verz. Schmett.* 238.
Cosmia, p., *Treit.*
Orthosia, p., *Guen.*
Mithymna, p., *Treit.; Boisd.*

Body stout. Head conical. Proboscis moderately long. Palpi stout, porrect, not extending beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ simple, much more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four hardly long spurs. Wings rather broad. Fore wings almost straight in front, rectangular at the tips; exte- hardly oblique in front, rounded hindward.

Europe.

1. Mesogona Acetosellæ.

Pallide cervina; alæ anticæ nigro conspersæ, lineis duabus transversis medianis subarcuatis testaceis cinereo marginatis, orbiculari et reniformi testaceo cinereoque marginatis, illa subrotunda; posticæ linea media cinerea testaceo marginata.

Phalæna-Noctua Acetosellæ, *Gmel. ed. Syst. Nat.* i. 5, 2571. 1158.

Noctua Acetosellæ, *Wien. Verz.* 84, 1. *Fabr. Mant. Ins.* ii. 177, 272; *Ent. Syst.* iii. 2, 112, 338. *Bork. Eur. Schmett.* iv. 690, 302. *Hübn. Samml. Eur. Schmett. Noct.* f. 220.

Mythimna Acetosellæ, *Hübn. Verz. Schmett.* 239, 2370. *Treit. Schmett. Eur.* v. 179, 2. *Frey. Neu. Beit. Schmett.* iii. pl. 202. *Dup. Hist. Nat. Lép. d'Eur.* vii. 128, pl. 109, f. 2. *Boisd. Ind. Méth.* 144, 1163.

Mesogona Acetosellæ, *Guen. Ann. Soc. Ent. Fr. Noct.* i. 405, 666; *Noct.* ii. 405, 666.

Noctua (Cosmia) Acetosellæ, *Meig. Syst. Besch.* iii. 149, 121, pl. 105, f. 9.

a—d. Europe. From M. Becker's collection.

2. Mesogona oxalina.

Ferrugineo-fusca; abdomen ferrugineo-cinerascens; alæ anticæ cinereo-fuscæ, lineis duabus obliquis transversis postice approximatis annulisque duobus intermediis pallidioribus, lineis duabus exterioribus e lunulis nigricantibus; posticæ canescentes, fascia submarginali cinerea.

Noctua oxalina, *Hübn. Eur. Schmett. Noct.* pl. 45, f. 219. *Dup. Hist. Nat. Lép. Fr.* vii. 130, pl. 109, f. 3. *Frey. Beit. Ges. Schm.* pl. 112.

Mythimna oxalina, *Hübn. Verz. Schmett.* 239, 2369. *Treit. Schmett. Eur.* v. 178, 1; *Suppl.* x. 105. *Boisd. Ind. Méth.* 144, 1164.

Mesogona oxalina, *Guen. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 405, 667.

Noctua (Cosmia) oxalina, *Meig. Syst. Besch.* iii. 148, 120, pl. 105, f. 8.

a—c. Europe. From M. Becker's collection.

North America.

3. Mesogona culea.

Pallidissime cervina; abdomen cinerescens; alæ anticæ lineis duabus transversis obliquis fuscis pallido marginatis, maculis indistinctis, reniformi nigro signata; posticæ cinerascentes linea obscuriore.

Mesogona culea, *Guen. Noct.* i. 404, 665.

a. East Florida. Presented by E. Doubleday, Esq.

Mexico.

4. Mesogona madida.

Ochracea; palpi rufescentes, apice ochracei; abdomen fulvo-rufescens; alæ anticæ lineis duabus medianis pallidioribus indistinctis remotis, submarginali maculisque fere obsoletis; posticæ semihyalinæ, rufescente tinctæ.

Mesogona madida, *Guen. Noct.* i. 404, 664.

Mexico.

Genus 20. CAREA.

Mas. Corpus robustum. Caput breve. Proboscis brevis. Palpi ascendentes, arcuati; articulus 3us minimus. Antennæ simplices, setaceæ, corporis dimidio non longiores. Abdomen alas posticas paullo superans, apice compressum attenuatum et fasciculatum. Pedes robusti; tibiæ posticæ calcaribus longis. Alæ latiusculæ; anticæ apud costam rectæ; apice rectangulatæ, margine exteriore apud medium fere angulato, antice non obliquo, postice rotundato.

Male. Body stout. Head short. Proboscis short. Palpi ascending, curved, not reaching the vertex; third joint very small, not more than one-sixth of the length of the second. Antennæ simple, setaceous, not more than half the length of the body. Abdomen extending a little beyond the hind wings, compressed, attenuated and tufted at the tip. Legs very stout; hind tibiæ with four long spurs. Wings rather broad. Fore wings straight in front, rectangular at the tips, not oblique along the fore half of the exterior border, which is almost angular in the middle; hind part rounded; inferior veins much as usual.

1. Carea varipes.

Mas. *Miniata; antennæ fuscæ; pectus ex parte album; abdomen ferrugineo-rufum, apice nigricans; pedes subtus albi, tibiis tarsisque supra fuscis, alæ anticæ fascia subarcuata angusta subpurpurascente fusco marginata; posticæ pallidiores, margine interiore testaceo subtus albido.*

Male. Red-lead colour. Antennæ brown. Pectus partly white. Abdomen ferruginous-red, blackish at the tip. Legs white beneath; tibiæ and tarsi brown above. Fore wings with a slender lilac brown-bordered very slightly curved band, which extends from four-fifths of the length of the costa to the interior angle. Hind wings paler than the fore wings, testaceous above and whitish beneath along the interior border. Length of the body 8 lines; of the wings 18 lines.

Malacca. In Mr. Wallace's collection.

Genus 21. EPISPARIS.

Mas et fœm. Corpus sat validum. Proboscis mediocriter longa. Palpi oblique ascendentes; articulus 3us minimus. Antennæ subpectinatæ, ramis dense ciliatis. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ longiusculæ et latiusculæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore integro mediocriter obliquo apud medium subangulato; posticæ margine exteriore apud medium distincte angulato. *Mas.*—Abdomen sexualibus maximis.

Slightly resembling some of the *Saturniidæ*.

Body moderately stout. Proboscis moderately long. Palpi ascending obliquely; third joint very small, not more than one-sixth of the length of the second. Antennæ slightly pectinated in both sexes; the branches thickly ciliated. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four rather long spurs. Wings rather long and broad. Fore wings straight in front, angular at the tips, exterior border entire, moderately oblique, slightly angular in the middle. Hind wings with the exterior border distinctly angular in the middle. *Male.*—Abdomen with very large apical appendages; lateral valves pilose.

1. EPISPARIS PENETRATA.

Mas et fœm. *Ochracea, subtus alba; antennæ testaceæ; pedes albi, femoribus tibiisque anticis supra rufis; alæ anticæ litteris costalibus albis, lineis transversis fuscis purpurascentibus marginatis, basali distincta, interiore dislocata, mediana valde flexa, exteriore recta, reniformi argenteo conspersa fusco marginata; posticæ apud costam purpureo-albidæ, maculis duabus discalibus ochraceis, linea mediana distincta subangulata.*

Male and female. Orange, white beneath. Antennæ testaceous. Abdomen more dull than the thorax. Legs white; fore femora and fore tibiæ red above. Fore wings with some white marks along the costa; transverse lines brown and accompanied by a purplish tinge; basal line distinct; interior one dislocated; median one much bent; exterior one straight; claviform and orbicular spots obsolete; reniform forming a silver-spangled brown-bordered spot, which is much more excavated in the male than in the female. Hind wings purplish, whitish along the costa, with two orange discal spots; median line distinct, forming a nearly right angle in the middle; under side whitish, with a brown discal dot and a fawn-coloured border; median line distinct, zigzag. Length of the body 6—8 lines; of the wings 16—18 lines.

a, b. Africa. Presented by E. Doubleday, Esq.

Genus 22. EPITAUSA.

Mas. Corpus sat robustum. Proboscis mediocriter longa. Palpi validi, longiusculi, oblique ascendentes; articulus 2us 3o cylindrico quadruplo longior. Antennæ serratæ, ciliatæ, corporis dimidio vix longiores. Abdomen alas posticas superans. Pedes validi; tibiæ posteriores dense fasciculatæ, posticæ calcaribus quatuor longis. Alæ longiusculæ, mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, subfalcatæ, margine exteriore integro valde obliquo.

Male. Body moderately stout. Proboscis moderately long. Palpi stout, rather long, obliquely ascending; third joint cylindrical, not more than one-fourth of the length of the second. Antennæ serrated, ciliated, hardly more than half the length of the body. Abdomen extending rather beyond the hind wings, tufted on each side towards the tip. Legs stout; posterior tibiæ thickly tufted;

hind tibiæ with four long spurs. Wings rather long, moderately broad. Fore wings straight in front, angular and almost falcate at the tips, entire and very oblique along the exterior border; fourth inferior vein very remote from the others.

This genus in some characters approaches the second group of *Noctuites*, and has a slight resemblance to the *Saturniidæ*.

1. EPITAUSA LÆTABILIS.

Mas. *Læte flava, subtus rosea; caput, thorax anticus et pedes antici obscure rufa; abdomen rufum, subtus basi pallide testaceum pilosissimum; pedes rufi, ex parte flavi, calcaribus genubusque posticis albo guttatis; alæ fusco subconspersæ, rufo unilineatæ; anticæ lineis duabus indistinctis angulosis rufescentibus interioribus, extus rufescentibus linea rufa guttisque duabus aut tribus albidis, orbiculari et reniformi e annulis duobus rufescentibus; posticæ guttis duabus aut tribus exterioribus nigris.*

Male. Bright yellow, mostly rosy red beneath. Head, fore part of the thorax and fore legs darker red. Abdomen red; under side darker, but pale testaceous and very pilose towards the base. Legs red, partly yellow; a white dot at the base of each spur and on each hind knee. Wings minutely and thinly speckled with brown, traversed by a straight red line, which extends from near the tips of the fore wings to the middle of the interior border of the hind wings. Fore wings with two indistinct angulose reddish interior lines; space beyond the straight line reddish, and including an indistinct angulose red line, which is marked by two or three whitish dots; a reddish costal subapical patch, behind which there is a white mark on the ciliæ; orbicular and reniform spots forming two reddish ringlets. Hind wings with two or three black dots between the straight line and the exterior border. Wings beneath brighter yellow and red, with some white points along the costa near the tip, with a lilac apical patch, and with a lilac line accompanying the straight one. Length of the body 8 lines; of the wings 18 lines.

a. St. Domingo. From Mr. Tweedie's collection.

Genus 23. AMARNA.

Corpus sat robustum. Proboscis mediocriter longa. Palpi validi, ascendentes; articulus 2us 3o lanceolato plus quadruplo longior. Abdomen alas posticas triente fere superans. Pedes validi;

tibiæ posticæ calcaribus quatuor longissimis. Alæ mediocriter latæ, breviusculæ; anticæ apud costam rectæ, apice rectangulatæ; margine exteriore apud medium subangulato postice mediocriter obliquo.

Body rather stout. Proboscis moderately long. Palpi stout, ascending to the vertex; third joint lanceolate, rather less than one-fourth of the length of the second. Abdomen extending near one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four very long spurs. Wings moderately broad, rather short. Fore wings straight in front, rectangular at the tips, moderately oblique along the hind part of the exterior border, which is almost angular in the middle; fourth inferior vein very remote from the other three, which are contiguous.

1. Amarna discursa.

Ferrugineo-rufa; abdomen pallidum; alæ anticæ basi apud costam incrassatæ subdilatatæ, apud marginem interiorem pilosissimæ, linea exteriore fusca undulata albido marginata, macula orbiculari e gutta alba, reniformi magna fusca albido marginata; posticæ fuscæ, apud marginem exteriorem pallide cinereæ.

Ferruginous-red. Abdomen paler than the thorax. Fore wings thickened and slightly dilated at the base of the costa, very pilose towards the interior border; lines obsolete, except the exterior one, which is brown, whitish-bordered, and very undulating; claviform spot obsolete; orbicular represented by a white dot; reniform large, brown, whitish-bordered, of the usual shape. Hind wings brownish, pale cinereous along the exterior border. Length of the body 7 lines; of the wings 15 lines.

a. ———?

Genus 24. DABARITA.

Corpus vix robustum. Palpi breves, subascendentes, non crassi; articulus 3us brevissimus. Proboscis mediocriter longa. Antennæ simplices, corporis dimidio multo longiores. Abdomen alas posticas paullo superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice acuminatæ, margine exteriore sat obliquo valde undulato. *Mas.*—Antennæ pubescentes.

Body hardly robust. Palpi short, not stout, slightly ascending; third joint very short. Proboscis moderately long. Antennæ simple, much more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, acuminated at the tips; exterior border rather oblique, deeply undulating. *Male.*—Antennæ pubescent.

1. DABARITA SUBTILIS.

Mas et fœm. *Lateritio-rufa; pectus album; abdomen pallidum, lateribus albidis; pedes albi, anteriores supra rufi, alæ anticæ linea interiore recta obliqua transversa fusca, gutta discali nigra lineaque duplicata exteriore subarcuata vix obliqua fusca, maculis subobsoletis; posticæ albæ, apud margines rufescentes.* Var.—*Alæ anticæ læte rufæ, lineis subobsoletis.*

Brick-red colour. Pectus white. Abdomen much paler than the thorax, whitish along each side. Legs white; anterior legs red above. Fore wings with a straight oblique transverse brown line before the middle, with a black discal dot, and with a double exterior very slightly curved, hardly oblique, transverse brown line; spots almost obsolete. Hind wings white, with a red tinge about their borders. Length of the body 6 lines; of the wings 14 lines. *Var.*—Fore wings brighter red; the lines almost obsolete.

a, *b*. North India. From Mr. Stevens' collection.
c. ——— ? From Mr. Milne's collection.

Fam. 7. COSMIDÆ.

Corpus sat gracile aut sat validum. Proboscis sat longa, raro brevis. Palpi ascendentes; articulus 3us sæpissime longiusculus, cylindricus. Antennæ sæpissime simplices. Pedes postici calcaribus longis. Alæ anticæ coloribus variis, sæpe acutæ, margine exteriore subobliquo nonnunquam subundulato; lineis medianis non dentatis trapezium fingentibus.

Orthosides, p., et Noctuo-Bombycides, p., *Boisd.; Dup.*
Xanthidi, p., *Steph. Cat. Brit. Lep.* 122; ed. 2, 110.
Cosmidæ, *Guen. Noct.* ii. 1.

Body rather slender or moderately stout. Proboscis elongate, rarely short. Palpi ascending; third joint generally cylindrical and rather long. Antennæ simple, or nearly so. Hind tibiæ with long

spurs. Fore wings moderately broad, various as to colour, often acute at the tips; exterior border slightly oblique, occasionally slightly undulating.

A. Alæ anticæ apice acutæ.
  A. Palpi longiusculi, ascendentes. - 1. IPIMORPHA, *Hübn.*
  B. Palpi breviores, subascendentes.
    A. Alæ anticæ fasciis obliquis, non parallelis. 4. COSMIA, *Ochs.*
    B. Alæ anticæ fasciis rectis, parallelis. 5. ATETHMIA, *Hübn.*
B. Alæ anticæ apice subacuminatæ, aut subrotundatæ.
  A. Palpi sat graciles. - - - - 2. ENARGIA, *Hübn.*
  B. Palpi validi. - - - - - 3. CLEOCERIS, *Boisd.*

Genus 1. IPIMORPHA.

Corpus vix robustum. Proboscis mediocriter longa. Palpi pilosi, longiusculi, ascendentes, sat graciles; articulus 2us 3o longiconico triplo longior. Antennæ graciles, corporis dimidio multo longiores. Abdomen alas posticas vix superans. Pedes sat graciles; tibiæ posticæ calcaribus longis. Alæ mediocriter latæ; anticæ acutæ, apud costam vix convexæ, margine exteriore perpaullo undulato et obliquo. *Mas.*—Antennæ vix ciliatæ.

Tethea, *Ochs.; Steph.; Guen. Ann. Soc. Ent. Fr.* vi. 307; *Noct.* ii. 2.
Cymatophora, p., *Treit; Boisd.*
Ipimorpha, *Hübn. Verz Schmett.* 238.
Kymatophora, *Sodoff.*
Plastenis, *Boisd. Ind. Méth.* 93.

Body hardly stout. Proboscis moderately long. Palpi pilose, ascending, rather long and slender; third joint elongate-conical, about one-third of the length of the second. Antennæ slender, simple, much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings hardly convex in front, acute at the tips, very slightly undulating and oblique along the exterior border. *Male.*—Antennæ very minutely ciliated.

1. Ipimorpha subtusa.

Glaucescente-cervina; alæ anticæ lineis tribus transversis subrectis unaque submarginali undulata testaceis, orbiculari et reniformi maculaque postica cervinis magnis distinctis testaceo marginatis; posticæ ciliis pallidis.

———— ————, *Engr. Pap. d'Eur.* 402, a—c.

Noctua subtusa, *Wien. Verz.* 88, 17. *Fabr. Mant. Ins.* ii. 152, 130; *Ent. Syst.* iii. 2, 62, 173. *Bork. Eur. Schmett.* iv. 650, 275. *Hübn. Eur. Schmett. Noct.* pl. 44, f. 213. *Haw. Lep. Brit.* 267. *Dup. Hist. Nat. Lép. Fr.* vi. 148, pl. 82, f. 4. *Frey. Beit.* i. pl. 10.

Cymatophora subtusa, *Treit. Schmett.* v. 82, 3.

Tethea subtusa, *Steph. Ill. Brit. Ent. Haust.* iii. 56. *Guen. Noct.* ii. 3, 668.

Plastenis subtusa, *Boisd. Ind. Méth.* 93, 705.

Phalæna-Noctua subtusa, *Gmel. ed. Syst. Nat.* i. 5, 2540, 1020.

Noctua (Cerastis) subtusa, *Meig. Syst. Besch.* iii. 155, 134, pl. 106, f. 9.

Ipimorpha subtusa, *Hübn. Verz. Schmett.* 238, 2365.

a—f. England. From Mr. Stephens' collection.
g—i. England.
j, k. Europe. From M. Becker's collection.

2. Ipimorpha retûsa.

Glaucescente-fusca; abdomen cinereo-cervinum; alæ anticæ lineis tribus transversis subrectis unaque submarginali undulata canescentibus, orbiculari et reniformi magnis canescente marginatis; posticæ subpallidiores, ciliis testaceis.

———— ————, *Engr. Pap. d'Eur.* 402, d.

Phalæna-Noctua retusa, *Linn. Faun. Suec.* 1218. *Gmel. ed. Syst. Nat.* i. 5, 2544, 193.

Noctua retusa, *Wien. Verz.* 88, 18. *Fabr. Mant. Ins.* ii. 153, 131; *Ent. Syst.* iii. 2, 62, 174. *Esp. Schmett.* iv. pl. 178, f. 1. *Sepp. Ins.* iii. pl. 39. *Bork. Eur. Schmett.* iv. 648, 274. *Haw. Lep. Brit.* 269. *Hübn. Schmett. Eur. Noct.* pl. 44, f. 214. *Dup. Hist. Nat. Lép. Fr.* vi. 145, pl. 82, f. 3. *Frey. Beit.* iii. 143.

Cosmia chrysoglossa, *Treit. Phil.* ii. 5, pl. 1.

Noctua vetula, *Hübn. Beitr.* pl. 2, H.

Cymatophora retusa, *Treit. Schmett.* v. 80, 2.

Noctua gracilis, *Haw. Lep. Brit.* 268.
Plastemis retusa, *Boisd. Ind. Méth.* 93, 706.
Tethea gracilis, *Steph. Ill. Brit. Ent. Haust.* iii. 57.
Tethea retusa, *Guen. Noct.* ii. 3, 669.
Noctua (Cerastis) retusa, *Meig. Syst. Besch.* iii. 155, 133, pl. 106, f. 8.
Ipimorpha retusa, *Hübn Verz. Schmett.* 238, 2364.

a—f. England. From Mr. Stephens' collection.
g—j. England.

Genus 2. ENARGIA.

Corpus sat gracile. Proboscis mediocriter longa. Palpi pilosi, ascendentes, sat graciles; articulus 2us 3o triplo aut quadruplo longior; 3us lanceolatus aut cylindricus. Antennæ corporis dimidio multo longiores. Abdomen alas posticas plus minusve superans. Pedes sat graciles; tibiæ posticæ calcaribus longis. Alæ mediocriter latæ; anticæ apud costam subrectæ, apice subacuminatæ, margine exteriore perparum obliquo et convexo. *Mas.*—Antennæ subserratæ.

Enargia, *Hübn. Verz. Schmett.* 235.
Euperia, *Guen. Ind.* 242; *Noct.* ii. 4.
Cosmia, p., *Ochs.; Treits.; Boisd.*

Body rather slender. Proboscis moderately long. Palpi pilose, ascending, rather slender; third joint lanceolate or cylindrical, one-third or one-fourth of the length of the second. Antennæ much more than half the length of the body. Abdomen extending more or less beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings almost straight in front, very slightly oblique and convex along the exterior border; apical angle slightly rounded. *Male.*—Antennæ minutely serrated.

1. Enargia contusa.

Ferrugineo-cervina; abdomen cinereum; alæ anticæ fasciis indistinctis obscurioribus pallido marginatis, orbiculari et reniformi pallido marginatis, hac apud medium arctata, illa parva; posticæ cinereo-fuscæ, ciliis pallidis.

Cosmia contusa, *Herr.-Schæff. Schmett. Eur.* ii. 223, 130, f. 517, 518.
Euperia contusa, *Guen. Noct.* ii. 5, 671.

Germany.

2. Enargia abluta.

Albida; alæ anticæ lineis transversis indistinctis, macula apud reniformem fusca.

Noctua abluta, *Hübn. Eur. Schmett. Noct.* f. 351.
Cosmia abluta, *Treit. Schmett.* ii. 381. *Eversm. Herr.-Schæff. Schmett. Eur.* ii. 223, 128. *Boisd. Ind. Méth.* 143, 1159.
Euperia abluta, *Guen. Ind.* 242; *Noct.* ii. 5. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 327, pl. 30.

Austria. Hungary. South Russia.

a, *b*. Europe. From M. Becker's collection.

3. Enargia imbuta.

Luteo-corticina aut luteo-fulva; alæ anticæ area media lateritia, maculis pallidis, reniformi postice infuscata, striga extra basali semicirculari; posticæ lutescentes.

Cosmia imbuta, *Boisd. Ind. Méth.* 143, 1160. *Herr.-Schæff. Schmett. Eur.* ii. 223, 127; ii. pl. 24, f. 115, 116.
Euperia imbuta, *Guen. Noct.* ii. 5, 673.

Hungary.

4. Enargia fulvago.

Flavescens; abdomen testaceum; alæ anticæ lituris variis guttis submarginalibus fasciaque diffusa cervinis; posticæ albæ.

——— ———, *Engr. Pap. d'Eur.* 526, b.
Phalæna-Noctua fulvago, *Linn. Faun. Suec.* 1173. *Clerck, Icon.* pl. 6, f. 15. *Gmel. ed. Syst. Nat.* i. 5, 2578, 190.
Noctua fulvago, *Wien. Verz.* 86, 1. *Fabr. Mant. Ins.* ii. 159, 162; *Ent. Syst.* iii. 2, 73, 208. *Hübn. Eur. Schmett. Noct.* pl. 41, f. 198. *Dup. Hist. Nat. Lép. Fr.* vii. 125, pl. 109, f. 1.
Cosmia fulvago, *Treit. Schmett.* v. 380. *Boisd. Ind. Méth.* 143, 1161. *Steph. Ill. Brit. Ent. Haust.* iii. 62. *Herr.-Schæff. Schmett. Eur.* ii. 125, 223, 126.
Noctua paleacea, *Esp. Schmett.* iv. pl. 122, f. 3, 4.
Noctua gilvago, *Bork. Schmett.* iv. 683, 295.
Noctua angulago, *Haw. Lep. Brit.* 238.
Enargia palliacea, *Hübn. Verz. Schmett.* 235, 2349.
Noctua (Cosmia) fulvago, *Meig. Syst. Besch.* iii. 149, 122, pl. 106, f. 13.

North America.

3. Mesogona culea.

Pallidissime cervina; abdomen canescens; alæ anticæ lineis duabus transversis obliquis fuscis pallido marginatis, maculis indistinctis, reniformi nigro signata; posticæ cinerascentes linea obscuriore.

Mesogona culea, *Guen. Noct.* i. 404, 665.

a. East Florida. Presented by E. Doubleday, Esq.

Mexico.

4. Mesogona madida.

Ochracea; palpi rufescentes, apice ochracei; abdomen fulvo-rufescens; alæ anticæ lineis duabus medianis pallidioribus indistinctis remotis, submarginali maculisque fere obsoletis; posticæ semihyalinæ, rufescente tinctæ.

Mesogona madida, *Guen. Noct.* i. 404, 664.

Mexico.

Genus 20. CAREA.

Mas. Corpus robustum. Caput breve. Proboscis brevis. Palpi ascendentes, arcuati; articulus 3us minimus. Antennæ simplices, setaceæ, corporis dimidio non longiores. Abdomen alas posticas paullo superans, apice compressum attenuatum et fasciculatum. Pedes robusti; tibiæ posticæ calcaribus longis. Alæ latiusculæ; anticæ apud costam rectæ; apice rectangulatæ, margine exteriore apud medium fere angulato, antice non obliquo, postice rotundato.

Male. Body stout. Head short. Proboscis short. Palpi ascending, curved, not reaching the vertex; third joint very small, not more than one-sixth of the length of the second. Antennæ simple, setaceous, not more than half the length of the body. Abdomen extending a little beyond the hind wings, compressed, attenuated and tufted at the tip. Legs very stout; hind tibiæ with four long spurs. Wings rather broad. Fore wings straight in front, rectangular at the tips, not oblique along the fore half of the exterior border, which is almost angular in the middle; hind part rounded; inferior veins much as usual.

1. Carea varipes.

Mas. *Miniata; antennæ fuscæ; pectus ex parte album; abdomen ferrugineo-rufum, apice nigricans; pedes subtus albi, tibiis tarsisque supra fuscis, alæ anticæ fascia subarcuata angusta subpurpurascente fusco marginata; posticæ pallidiores, margine interiore testaceo subtus albido.*

Male. Red-lead colour. Antennæ brown. Pectus partly white. Abdomen ferruginous-red, blackish at the tip. Legs white beneath; tibiæ and tarsi brown above. Fore wings with a slender lilac brown-bordered very slightly curved band, which extends from four-fifths of the length of the costa to the interior angle. Hind wings paler than the fore wings, testaceous above and whitish beneath along the interior border. Length of the body 8 lines; of the wings 18 lines.

Malacca. In Mr. Wallace's collection.

Genus 21. EPISPARIS.

Mas et fœm. Corpus sat validum. Proboscis mediocriter longa. Palpi oblique ascendentes; articulus 3us minimus. Antennæ subpectinatæ, ramis dense ciliatis. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ longiusculæ et latiusculæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore integro mediocriter obliquo apud medium subangulato; posticæ margine exteriore apud medium distincte angulato. *Mas.*—Abdomen sexualibus maximis.

Slightly resembling some of the *Saturniidæ*.

Body moderately stout. Proboscis moderately long. Palpi ascending obliquely; third joint very small, not more than one-sixth of the length of the second. Antennæ slightly pectinated in both sexes; the branches thickly ciliated. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four rather long spurs. Wings rather long and broad. Fore wings straight in front, angular at the tips, exterior border entire, moderately oblique, slightly angular in the middle. Hind wings with the exterior border distinctly angular in the middle. *Male.*—Abdomen with very large apical appendages; lateral valves pilose.

Xanthia subflava, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xxxi. 3, 219, 11.
Dicycla? subflava, *Guen. Noct.* ii. 8, 676.
Lower Volga District.

Genus 4. COSMIA.

Corpus sat robustum. Proboscis brevis. Palpi graciles, subascendentes; articulus 3us cylindricus, 2i trientis longior. Abdomen alas posticas non aut vix superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ acutæ, apud costam perparum convexæ, margine exteriore subobliquo vix undulato.

Cosmia, *Ochs.; Treit.; Boisd.; Steph.; Guen. Ann. Soc. Ent. Fr.* vi. 318; *Noct.* ii. 8.
Calymnia et Eustegnia, *Hübn. Verz. Schmett.* 235, 236.

Body moderately stout. Proboscis short. Palpi slender, slightly ascending; third joint cylindrical, more than one-third of the length of the second. Antennæ more than half the length of the body. Abdomen not or hardly extending beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings very slightly convex in front, acute at the tips, slightly oblique and hardly undulating along the exterior border.

1. Cosmia trapezina.

Testacea aut lutescens; alæ anticæ lineis duabus transversis pallidis, gutta apud maculam reniformem punctisque submarginalibus nigricantibus; posticæ cinereæ, testaceo marginatæ.

——— ———, *Merian, Ins. Eur.* pl. 11. *Engr. Pap. d'Eur.* 546, a—g.
Phalæna-Noctua trapezina, *Linn. Faun. Suec.* 1157. *Gmel. ed. Syst. Nat.* i. 5, 2547, 99.
Noctua trapezina, *Wien. Verz.* 88, 13. *Fabr. Sp. Ins.* ii. 219, 57; *Mant. Ins.* ii. 146, 86; *Ent. Syst.* iii. 2, 44, 117. *Esp. Schmett.* iv. pl. 87, f. 2, 3. *Bork. Schmett. Eur.* iv. 642, 271. *Hübn. Eur. Schmett. Noct.* pl. 42, f. 200. *Haw. Lep. Brit.* 257. *Knock, Ins.* ii. pl. 3, f. 1—4. *Sulz. Ins.* pl. 36, f. 6. *Sepp, Ins.* iii. pl. 46.

Cosmia trapezina, *Treit. Schmett.* v. 383, 5. *Dup. Hist. Nat. Lép. Fr.* vii. 113, pl. 108, f. 1. *Steph. Ill. Brit. Ent. Haust.* iii. 62. *Boisd. Ind. Méth.* 143, 115, 8. *Herr.-Schæff. Schmett. Eur.* ii. 223, 129. *Guen. Noct.* ii. 9, 677.

Noctua (Cosmia) trapezina, *Meig. Handb.* 160, 59, pl. 13, f. 2; *Syst. Besch.* iii. 150, 123, pl. 106, f. 2.

Calymnia trapezina, *Hübn. Verz. Schmett.* 235, 2350.

a—x. England. From Mr. Stephens' collection.
y—cc. England.
dd—ff. Europe. From M. Becker's collection.

2. Cosmia Pyralina.

Rubiginosa; abdomen cinereum; alæ anticæ fasciis undulatis nigricantibus, linea transversa exteriore plagaque costali subapicali albis; posticæ cinereæ, ciliis pallidis.

——— ———, *Engr. Pap. d'Eur.* 545, a, b.

Noctua Pyralina, *Wien. Verz.* 88, 12. *Bork. Eur. Schmett.* iv. 641, 270. *Hübn. Eur. Schmett. Noct.* pl. 42, f. 203. *Klöem. Ins.* ii. pl. 7, f. 1—3. *Haw. Lep. Brit.* 259. *Frey. Beit.* ii. pl. 129.

Cosmia Pyralina, *Treit. Schmett.* v. 392; *Suppl.* x. 106. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 108, f. 6. *Steph. Ill. Brit. Ent. Haust.* iii. 61. *Boisd. Ind. Méth.* 143, 1156. *Herr.-Schæff. Schmett. Eur.* ii. 224, 134. *Guen. Noct.* ii. 10, 679.

Noctua corusca, *Esp. Schmett.* iv pl. 135, f. 4, 5. *Bork. Eur. Schmett.* iv. 640, 269.

Noctua (Cosmia) Pyralina, *Meig. Syst. Besch.* iii. 151, 126, pl. 106, f. 12.

Eustegnia Pyralina, *Hübn. Verz. Schmett.* 236, 2353.

a—i. England. From Mr. Stephens' collection.
j. England. From Mr. Carter's collection.
k. England.
l—o. Europe. From M. Becker's collection.

3. Cosmia diffinis.

Ferrugineo-fulvescens; alæ anticæ lineis transversis pallidioribus et obscurioribus, maculis duabus costalibus albis; posticæ nigrocinereæ, ciliis pallidis.

——— ———, *Harris, Ins. Angl.* pl. 5, f. 8. *Engr. Pap. d'Eur.* f. 543, a, b. *Geoff. Ins. Par.* ii. 164.

Phalæna-Noctua diffinis, *Linn. Syst. Nat.* 848, 146. *Gmel. ed. Syst. Nat.* i. 5, 2563, 146.
Noctua diffinis, *Wien. Verz.* 88, 10. *Fabr. Sp. Ins.* ii. 230, 105; *Mant. Ins.* ii. 165, 206; *Ent. Syst.* iii. 87, 257. *Esp. Schmett.* iv. pl. 134, f. 2. *Bork. Eur. Schmett.* iv. 633, 267. *Scrib. Beit.* pl. 12, f. 1, 2. *Hübn. Schmett. Eur. Noct.* pl. 42, f. 202. *Haw. Lep. Brit.* 260. *Frey. Beit.* ii. pl. 130.
Noctua (Cosmia) diffinis, *Meig. Handb.* 171, 60, pl. 13, f. 10. *Syst. Besch.* iii. 150, 124, pl. 106, f. 3.
Cosmia diffinis, *Treit. Schmett.* v. 386, 4. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 108, f. 4. *Steph. Ill. Brit. Ent. Haust.* iii. 60. *Boisd. Ind. Méth.* 143, 1154. *Guen. Noct.* ii. 10, 680. *Herr.-Schæff. Schmett. Eur.* ii. 224, 132.
Eustegnia diffinis, *Hübn. Verz. Schmett.* 236, 2352.

a—j. England. From Mr. Stevens' collection.
k—m. England.
n—q. Europe. From M. Becker's collection.
r. ———?

4. Cosmia affinis.

Rufescens; abdomen nigro-cinereum, segmentis pallido marginatis; alæ anticæ lineis transversis pallidioribus, fasciis subobsoletis nigricantibus; posticæ nigricantes, basi cinereæ, ciliis testaceis.

——— ———, *Albin, Ins.* pl. 31, f. 49. *Engr. Pap. d'Eur.* 544, a, c, d, g.
Phalæna-Noctua affinis, *Gmel. ed. Syst. Nat.* i. 5, 2563, 144.
Noctua affinis, *Wien. Verz.* 88, 11. *Fabr. Sp. Ins.* ii. 230, 106; *Mant. Ins.* ii. 165, 207; *Ent. Syst.* iii. 2, 87, 258. *Esp. Schmett.* iv. pl. 134, f. 1. *Bork. Schmett.* iv. 637, 268. *Hübn. Eur. Schmett. Noct.* pl. 42, f. 201. *Scriba, Beit.* ii. pl. 12, f. 6, 7. *Sepp. Ins.* iv. pl. 3. *Haw. Lep. Brit.* 258.
Cosmia affinis, *Treit. Schmett.* v. 389, 5. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 108, f. 5. *Steph. Ill. Brit. Ent. Haust.* iii. 61. *Boisd. Ind. Méth.* 143, 1155. *Guen. Noct.* ii. 11, 682. *Herr.-Schæff. Schmett. Eur.* ii. 224, 131.
Noctua palliata, *Fabr. Ent. Syst.* iii. 97.
Noctua (Cosmia) affinis, *Meig. Handb.* 171, 61; *Syst. Besch.* iii. 151, 125, pl. 106, f. 4.
Calymnia affinis, *Hübn. Verz. Schmett.* 235, 2351.

a—o. England. From Mr. Stephens' collection.
p—w. England.
x—cc. Europe. From M. Becker's collection.

5. Cosmia confinis.

Rubente-cinerea; abdomen canescens; alæ anticæ disco ex parte costaque testaceis, fasciis tribus undulatis antice dilatatis albis fasciaque undulata fusca; posticæ canescentes, margine lato cinereo.

Cosmia confinis, *Herr.-Schæff. Schmett. Eur.* ii. 224, 133, pl. 87, f. 450. *Guen. Noct.* ii. 11, 681.

Turkey.

6. Cosmia? vulpecula.

Alæ anticæ rutilæ; strigis ordinariis obscurioribus, obsoletis, maculisque ordinariis rutilo-lutescentes; alæ posticæ sordide lutescentes subconcolores; subtus omnes rutilo-lutescentes; strigis duabus externis obsoletis, ciliis concoloribus.

Cosmia vulpecula, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1852, 1, 150, 1.

South Ural.

North America.

7. Cosmia orina.

Mas. *Carneo-cinerea; abdomen gracile, apice fasciculatum; alæ anticæ nigro conspersæ, margine exteriore vix obliquo, venis albo squamosis, lineis medianis angustis albis, maculis nigro conspersis albo marginatis; posticæ albidæ, apud marginem cinerascentes.*

Cosmia orina, *Guen. Noct.* i. 10, 678.

North America.

Asia

8. Cosmia? bombycina.

Fulva, roseo induta; alæ anticæ striga externa obsoleta, punctis duobus in disco margineque anteriore fulvis; posticæ dilutiores, sericeæ, basi flavescentes.

Cosmia bombycina, *Ménétriés, Mém. Acad. Imp. Sci. St. Petersb. 6me Sér. Sci. Nat.* vi. 285, 819, pl. 6, f. 7.

Bachkiria.

9. Cosmia restituta.

Fusca, subtus cinerea; alæ anticæ plagis pallidioribus, lineis transversis indistinctis obscure fuscis, maculis costalibus quatuor (intermediis magnis) albis; posticæ ciliis testaceis.

Brown, cinereous beneath. Palpi and antennæ tawny. Fore wings paler in some parts of the disk, and with very indistinct transverse dark brown lines; four white costal spots; first small, near the base; second and third large, attenuated hindward; fourth very small, near the tip. Hind wings with pale testaceous ciliæ. Length of the body 5 lines; of the wings 14 lines.

a. Nepaul. Presented by Major-Gen. Hardwicke.

Genus 5. ATETHMIA.

Corpus sat validum. Antennæ simplices, graciles. Abdomen alas posticas superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice acutæ, margine exteriore vix obliquo.

Atethmia, *Hübn. Verz. Schmett.* 238.
Athetmia, *Guen. Noct.* ii. 12.

Body moderately stout. Antennæ simple, slender. Abdomen extending somewhat beyond the hind wings. Wings moderately broad. Fore wings straight along the costa, acute at the tips; exterior border hardly oblique.

This genus seems to be allied to the *Heliothidæ*, and to the tribe *Minores*.

1. Atethmia subusta.

Mas. *Testacea; alæ anticæ fasciis quinque subundulatis subnebulosis fuscis, subtus strigis duabus discalibus nigris; posticæ albidæ, testaceo marginatæ, subtus fasciis duabus guttularibus nigris.*

Atethmia subusta (Noctua genuina, Heliophila divisata), *Hübn. Samml. Exot. Schmett.* ii. 8, 103, f. 205, 206; *Verz. Schmett.* 238, 2368.

Colombia.

2. ATETHMIA INUSTA.

Ochracea; alæ anticæ nigro conspersæ, lineis tribus posticis pallidis approximatis, macula orbiculari nulla, reniformi parva e guttis duabus nigricantibus pallido marginatis; posticæ ochraceo-albæ. Mas.—*Tibiæ anticæ apice nigricantes.*

Athetmia inusta, *Guen. Noct.* ii. 12, 683.

Brazil.

Edward Newman, Printer, 9, Devonshire Street, Bishopsgate.

LIST

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OF THE

SPECIMENS

OF

LEPIDOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM (Nat. his
Dept. of zoology.

BY

FRANCIS WALKER, F.L.S., &c.

PART XI.—NOCTUIDÆ.

PRINTED BY ORDER OF THE TRUSTEES.
LONDON, 1857.

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PREFACE.

THE object of the present Catalogue is to give a complete list of all the genera and species of Noctuidæ known to exist in the different collections. The letters *a*, *b*, *c*, &c., after the species, denote the specimens now contained in the British Museum, followed by the *habitat* and the mode in which each of them was obtained, and the absence of these *letters* indicates the species which are desiderata, and therefore desirable to be procured for the collection.

JOHN EDWARD GRAY.

British Museum,
March 10, 1857.

CATALOGUE

OF

LEPIDOPTERA HETEROCERA.

THIRD SERIES.

Fam. 8. HADENIDÆ.

Palpi pilosi, sæpissime robusti et ascendentes. Antennæ simplices, *maris* raro pectinatæ. Abdomen sat crassum, sæpissime cristatum. Pedes validi; tibiæ posticæ calcaribus longis. Alæ anticæ coloribus variis, linea submarginali fracta.

Hadenidi, p., *Guen. Ann. Soc. Ent. Fr.* vii. 201.
Hadenidæ, *Guen. Noct.* ii. 14.

Palpi pilose, very generally robust and ascending. Antennæ simple, rarely pectinated in the male. Abdomen rather stout, most often crested. Legs stout; hind tibiæ with long spurs. Fore wings with various colours, very generally of moderate breadth. The characters of this family are somewhat various, and especially those of the genus *Hadena*, in which some of the species have the third joint of the palpi very minute; but they may be easily distinguished from the other genera with palpi of the above structure.

A. Alæ posticæ non dilatatæ nec fasciculatæ.
A. Alæ anticæ plaga nulla trigona.
A. Antennæ non pectinatæ.
a. Antennæ plus minusve ciliatæ.
i. Palpi articulo 3o minimo.
* Corpus non pilosissimum.
† Abdomen *fœminæ* attenuatum.
2. DIANTHÆCIA, *Boisd.*
†† Abdomen *fœminæ* non attenuatum.
‡ Proboscis breviuscula.
§ Alæ mediocriter latæ.
1. EREMOBIA, *Steph.*
§§ Alæ sat angustæ. - 23. HORMA, *Walk.*
‡‡ Proboscis mediocriter longa.
§ Alæ anticæ margine exteriore vix obliquo.
* Corpus robustum. - - 25. CASANDRIA, *Walk.*
** Corpus sat gracile. - - 27. STIBÆRA, *Walk.*
§§ Alæ anticæ margine exteriore mediocriter obliquo. - 3. HECATERA, *Guen.*
§§§ Alæ anticæ margine exteriore sat obliquo.
× Statura magna. 21. EUROIS, *Hübn.*
×× Statura mediocris.
5. POLIA, *Treit.*
‡‡‡ Proboscis longiuscula. 28. ELYMISTIS, *Walk.*
** Corpus pilosissimum. - 6. DASYPOLIA, *Guen.*
ii. Palpi articulo 2o minuto.
* Corpus pilosissimum. - - 7. EPUNDA, *Dup.*
** Corpus non pilosissimum.
† Alæ anticæ apice rotundatæ.
‡ Palpi graciles.
§ Corpus sat robustum. 12. MISELIA, *Treit.*
§§ Corpus sat gracile. 10. RAPHIA, *Hübn.*
‡‡ Palpi robusti. - 18. EUPLEXIA, *Steph.*
†† Alæ anticæ apice acutæ. 15. JASPIDEA, *Boisd.*
iii. Palporum articulus 3us mediocris. 4. PHOROCERA, *Guen.*
iiii. Palporum articulus 2us 3o æqualis aut subæqualis.
* Alæ latæ. - - 20. POLYPHLÆNIS, *Boisd.*
** Alæ mediocres.
† Palpi ascendentes.
‡ Pedes breviusculi. 16. CHARIDEA, *Guen.*
‡‡ Pedes non breviusculi. 22. HADENA, *Treit.*
†† Palpi porrecti.

‡ Palpi articulo 3o lanceolato.
13. LAMPROSTICTA, *Hübn.*
‡‡ Palpi articulo 3o lineari cylindrico.
14. AGRIOPIS, *Boisd.*

b. Antennæ omnino nudæ.
i. Palporum articulus 3us mediocris.
4. PHORODERA, *Guen.*
ii. Palporum articulus 3us longiusculus.
19. HETEROCHROMA, *Guen.*

B. Antennæ *maris* pectinatæ.
a. Proboscis brevis. - - - 8. DERTHISA, *Walk.*
b. Proboscis mediocriter longa.
i. Corpus sat robustum. - 9. EUMICHTIS, *Hübn.*
ii. Corpus sat gracile. - - 26. PSAPHARA, *Walk.*
iii. Corpus valde robustum. - - 11. VALERIA, *Germ.*

B. Alæ anticæ plaga maxima trigona. 17. PHLOGOPHORA, *Ochs.*

B. Alæ posticæ *maris* dilatatæ et fasciculatæ. 24. ERANA, *Walk.*

Genus 1. EREMOBIA.

Corpus sat robustum. Proboscis breviuscula. Palpi porrecti, caput perpaullo superantes; articulus 3us minimus. Antennæ simplices, corporis dimidio valde longiores. Abdomen alas posticas vix superans. Pedes vix robusti; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo. *Mas.*—Antennæ subciliatæ.

Eremobia, *Steph.*
Xanthia, p., *Ochs.; Treit.; Dup.*
Atypha, p., *Hübn. Verz. Schmett.* 213.
Ilarus, *Boisd.; Guen. Ann. Soc. Ent. Fr.* vii. 208; *Noct.* ii. 15.
Cleophana, *Herr.-Schæff.*

Body moderately stout. Proboscis rather short. Palpi porrect, extending very little beyond the head; third joint very minute, not more than one-sixth of the length of the second. Antennæ simple, very much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, moderately obliquo along the exterior border. *Male.*—Antennæ very minutely ciliated.

1. Eremobia ochroleuca.

Albida; abdomen cervino-albidum; alæ anticæ fasciis duabus diffusis cervinis nigro variis; posticæ marginibus latis subcinereis.

——— ———, *Engr. Pap. d'Eur.* 488, a, b.
Noctua ochroleuca, *Wien. Verz.* 67, 4. *Esp. Schmett.* iv. 126, pl. 126, f. 1, 4. *Bork. Eur. Schmett.* iv. 660, 282. *Hübn. Eur. Schmett. Noct.* pl. 19, f. 92.
Atypha ochroleuca, *Hübn. Verz. Schmett.* 214, 2136.
Xanthia ochroleuca, *Treit. Schmett.* v. 345, 3. *Dup. Hist. Nat. Lép. Fr.* vi. 311, pl. 92, f. 3.
Eremobia ochroleuca, *Steph. Ill. Brit. Ent. Haust.* iii. 95.
Noctua (Xanthia) ochroleuca, *Meig. Syst. Besch.* iii. 159, 143, pl. 104, f. 1.
Ilarus ochroleuca, *Boisd. Ind. Méth.* 125, 1004. *Guen. Noct.* ii. 16, 685.
Noctua citrina, *Donov. Brit. Ins.* pl. 350. *Haw. Lep. Brit.* 223.
Cleophana ochroleuca, *Herr.-Schaff. Eur. Schmett.* ii. 298, 358.

a—e. England. From Mr. Stephens' collection.
f—h. England.
i. Ukraine. Presented by Dr. Dowler.
j—m. Europe. From M. Becker's collection.

Genus 2. DIANTHÆCIA.

Corpus robustum. Proboscis breviuscula. Palpi porrecti, pilosi, caput vix superantes; articulus 3us minimus. Antennæ corporis dimidio valde longiores. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; antice apud costam rectæ, apice rotundatæ, margine exteriore subconvexo mediocriter obliquo. *Mas.*—Antennæ subciliatæ. *Fœm.*—Abdomen elongatum et attenuatum.

Dianthæcia, *Boisd.; Guen. Ann. Soc. Ent. Fr.* vii. 204; *Noct.* ii. 16; *Steph.*
Polia, p., Hadena, p., et Miselia, p., *Treit.; Steph.*
Epia, p., Neuronia, p., Hadena, p., Mimetes, p., Polymixis, p., et Harmodia, p., *Hübn. Verz. Schmett.*

Body stout. Proboscis rather short. Palpi porrect, pilose, hardly extending beyond the head; third joint very minute, not more than one-sixth of the length of the second. Antennæ very much more than half the length of the body. Legs stout; hind

tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, slightly convex and moderately oblique along the exterior border. *Male.*—Antennæ minutely ciliated. *Female.*—Abdomen elongated and attenuated.

A. Alæ anticæ non glaucescentes.
A. Alæ anticæ albo non fasciatæ nec plagiatæ.
A. Alæ anticæ non luteo notatæ.
a. Alæ anticæ non cinerascentes.
i. Alæ anticæ lunulis nullis marginalibus nigris. Echii, *Bork.*
ii. Alæ anticæ lunulis marginalibus nigris.
* Thorax non albo varius.
† Alæ anticæ orbiculari non obliqua. carpophaga, *Bork.*
†† Alæ anticæ orbiculari obliqua.
‡ Alæ anticæ linea submarginali subangulata. capsincola, *Wien. Verz.*
‡‡ Alæ anticæ linea submarginali valde angulata. Cucubali, *Wien. Verz.*
** Thorax albo varius. - - Magnolii, *Boisd.*
b. Alæ anticæ cinerascentes.
i. Alæ anticæ non albo variæ. - tephroleuca, *Boisd.*
ii. Alæ anticæ albo variæ. - sejuncta, *Herr.-Schæff.*
B. Alæ anticæ basi luteo strigatæ. - filigramma, *Esp.*
C. Alæ anticæ luteo variæ.
a. Alæ anticæ non testaceæ. - xanthocyanea, *Hübn.*
b. Alæ anticæ testaceæ. - - capsophila, *Anderr.*
B. Alæ anticæ albo plagiatæ.
A. Alæ anticæ macula nulla apicali. - albomacula, *Bork.*
B. Alæ anticæ macula apicali alba. - conspersæ, *Wien. Verz.*
C. Alæ anticæ albo fasciatæ.
A. Alæ anticæ non cervinæ.
a. Alæ posticæ obscuræ. - - compta, *Wien. Verz.*
b. Alæ posticæ pallidæ. - - - Armeriæ, *Boisd.*
B. Alæ anticæ cervinæ. - - - - Silenes, *Hübn.*
B. Alæ anticæ glaucescentes. - - - cæsia, *Wien. Verz.*

1. Dianthæcia Echii.

Cervino-albida; thorax lunulis duabus lateralibus nigris; alæ anticæ fasciis duabus diffusis fuscis, lineis transversis undulosis ocellisque duobus nigris, ciliis nigro notatis; posticæ fuscescentes, marginibus latis obscurioribus, ciliis albis.

——— ———, *Engr. Pap. d'Eur.* 488, c, d.
Noctua Echii, *Bork. Eur. Schmett.* iv. 67. *Hübn. Eur. Schmett. Noct.* f. 91. *Dup. Hist. Nat. Lép. Fr.* vi. 308, pl. 93. *Frey. Beit.* ii. 173.
Miselia Echii, *Treit. Schmett.* ii. 343; *Suppl.* x. 100.
Noctua Brecciæformis, *Esp. Schmett.* iv. 198.
Noctua Syngenesiæ, *Scriba, Beit.* iii. pl. 13, f. 5.
Epia Echii, *Hübn. Verz. Schmett.* 214, 2132.
Dianthæcia Echii, *Boisd. Ind. Méth.* 125, 1003. *Guen. Noct.* ii. 18, 686. *Herr.-Schæff. Schmett. Eur.* ii. 248, 195.

a—d. Europe. From M. Becker's collection.

2. Dianthæcia carpophaga.

Fuscescens; thorax fascia antica vittisque duabus nigricantibus; abdomen testaceum; alæ anticæ ocellis duobus discalibus, lineis transversis undulatis, guttis costalibus lunulisque marginalibus albidis nigro marginatis; posticæ subcinereæ, linea discali margineque lato fuscis.

Noctua carpophaga, *Bork. Eur. Schmett.* iv. 169. *Och. Dup. Hist. Nat. Lép.* Fr. iii. 305, pl. 92.
Noctua perplexa, *Hübn. Eur. Schmett. Noct.* f. 89.
Miselia carpophaga, *Treit. Schmett.* i. 306.
Neuronia perplexa, *Hübn. Verz. Schmett.* 216, 2149.
Dianthæcia carpophaga, *Boisd. Ind. Méth.* 125, 1001. *Herr.-Schæff. Schmett. Eur.* ii. 249, 193. *Guen. Noct.* ii. 19, 687.
Var. Noctua ochracea, *Haw. Lep. Brit.* 110.
Hadena? ochracea, *Steph. Ill. Brit. Ent. Haust.* ii. 186, pl. 23.
Dianthæcia capsophila? *Herr.-Schæff. Schmett. Eur.* ii. 462.
Var. Noctua Nisus, *Germ.*
Dianthæcia Nisus, *Herr.-Schæff. Schmett. Eur.* ii. 194, pl. 90, f. 461.

a—j. England. From Mr. Stephens' collection.
k—n. England.
o—r. Europe. From M. Becker's collection.

3. Dianthæcia capsophila.

Testacea; alæ anticæ ochraceo fuscoque variæ; area tertia pone lineam undulatam testacea; posticæ canescentes, linea fasciaque marginali cinereis.

Dianthæcia capsophila, *Anderregg. Boisd. Ind. Méth.* 125, 1002. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 100, pl. 58. *Herr.-Schæff. Schmett. Eur.* ii. 248, 192, pl. 90, f. 462. *Guen. Noct.* ii. 20, 688.

Valais. South France. Spain.

4. Dianthæcia capsincola.

Fusca; alæ anticæ lineis transversis lunulatis guttisque costalibus nigricantibus albidisque, linea submarginali angulosa, orbiculari et reniformi albido et nigricante marginatis, macula postica nigro-fusca; posticæ cinereæ, margine fusco, ciliis canescentibus.

———, *Engr. Pap. d'Eur.* 460, b.

Noctua capsincola, *Wien. Verz.* 84, 6. *Esp. Schmett.* iv. pl. 173, f. 5. *Bork. Eur. Schmett.* iv. 367, 151. *Hübn. Eur. Schmett. Noct.* pl. 12, f. 57. *Dup. Hist. Nat. Lép. Fr.* vi. 334, pl. 93, f. 6. *Scriba, Beit.* pl. 6, f. 5. *Haw. Lep. Brit.* 103.

Noctua (Hadena) capsincola, *Meig. Handb.* 160, 33; *Syst. Besch.* iii. 110, 51, pl. 101, f. 5.

Hadena capsincola, *Hübn. Verz. Schmett.* 216, 2157. *Treit. Schmett.* v. 308, 3.

Miselia capsincola, *Steph. Ill. Brit. Ent. Haust.* ii. 188.

Noctua bicruris, *Naturf.* ix. 53.

Noctua impressa? *Esp. Schmett.* iv. pl. 152, f. 3.

Noctua Cucubali, *var.*, *Fabr. Ent. Syst.* iii. 300.

Dianthæcia capsincola, *Boisd. Ind. Méth.* 125, 997. *Herr.-Schæff. Schmett. Eur.* ii. 248, 191. *Guen. Noct.* ii. 21, 689.

a—i. England. From Mr. Stephens' collection.
j—l. England.
m—p. Europe. From M. Becker's collection.

5. Dianthæcia Cucubali.

Cinerascens; caput et thorax fusco conspersa; alæ anticæ subroseo-fuscæ, subnebulosæ, fasciis tribus repandis pallidioribus albido nigroque marginatis, 2a antice furcata, costa pallidiore guttis nigris; posticæ canescentes, margine lato fuscescente.

———, *Engr. Pap. d'Eur.* 465, a—c.

Noctua Cucubali, *Wien. Verz.* 84, 5. *Esp. Schmett.* iv. pl. 173, f. 6. *Bork. Eur. Schmett.* iv. 363, 150. *Hübn. Eur. Schmett. Noct.* pl. 12, f. 51. *Sepp. Ins.* iv. pl. 32. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 93, f. 5. *Frey. Beit.* pl. 88. *Haw. Lep. Brit.* 102.

Noctua (Hadena) Cucubali, *Meig. Handb.* 160, 33; *Syst. Besch.* iii. 110, 51.
Noctua rivularis, *Fabr. Sp. Ins.* ii. 234, 124; *Mant. Ins.* ii. 171, 241; *Ent. Syst.* iii. 2, 201, 300.
Phalæna-Noctua Cucubali, *Gmel. ed. Syst. Nat.* i. 5, 2576, 1175.
Hadena Cucubali, *Hübn. Verz. Schmett.* 216, 2158. *Treit. Schmett.* v. 308, 3. *Steph. Ill. Brit. Ent. Haust.* ii. 187. *Curt. Brit. Ent.* 308.
Dianthæcia Cucubali, *Boisd. Ind. Méth.* 125, 996. *Herr.-Schæff. Schmett. Eur.* ii. 248, 190. *Guen. Noct.* ii. 21, 690.

a—f. England. From Mr. Stephens' collection.
g, h. England.
i—m. Europe. From M. Becker's collection.

6. Dianthæcia Silenes.

Cervina; thorax albo varius; alæ anticæ lineis duplicatis undulatis fuscis, macula postica strigisque lanceolatis exterioribus nigris, maculis orbicularibus et reniformi, fascia exteriore incompleta guttisque marginalibus albis; posticæ pallidiores, fascia submarginali fusca.

Noctua Silenes, *Hübn. Eur. Schmett. Noct.* f. 653.
Miselia Silenes, *Treit. Schmett. Suppl.* 67.
Dianthæcia Silenes, *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 219, pl. 69. *Boisd. Ind. Méth.* 125, 994. *Herr.-Schæff. Schmett. Eur.* ii. 248, 196. *Guen. Noct.* ii. 22, 691.
Epia Silenes, *Hübn. Verz. Schmett.* 214, 2133.

South France. Spain.

7. Dianthæcia sejuncta.

Cinerea; alæ anticæ lineis transversis undulatis variis fuscis, orbiculari et reniformi albo variis, macula costali subapicali strigisque lanceolatis submarginalibus albis.

Dianthæcia sejuncta, *Herr.-Schæff. Schmett. Eur.* ii. 249, 197, pl. 76, f. 391. *Guen. Noct.* ii. 22, 692.

Constantinople.

8. Dianthæcia cæsia.

Canescens; alæ anticæ fasciis duabus diffusis (exteriore latissima) glaucis, macula intermedia costali guttisque costalibus nigricantibus; posticæ cinereæ, margine lato fuscescente, ciliis pallidis.

——— ———, *Engr. Pap. d'Eur.* 355, a—c.

Noctua cæsia, *Wien. Verz.* O, 9. *Bork. Eur. Schmett.* iv. 118. *Hübn. Eur. Schmett. Noct.* f. 60. *Dup. Hist. Nat. Lép. Fr.* vi. 415, pl. 98, f. 6.

Noctua dichroma, *Esp. Schmett.* iv. pl. 155, f. 2.

Miselia cæsia, *Triet. Schmett.* v. 21.

Mimetes cæsia, *Hübn. Verz. Schmett.* 210, 2102.

Dianthæcia cæsia, *Boisd. Ind. Méth.* 125, 993. *Dup. Suppl.* pl. 25. *Herr.-Schæff. Schmett. Eur.* ii. 248, 189. *Guen. Noct.* ii. 22, 694.

Valais. Savoy. Tyrol. Styria.

a, b. Europe. From M. Becker's collection.
c. ———? From Mr. Milne's collection.

9. Dianthæcia filigramma.

Fusca; thorax albo nigroque varius; alæ anticæ albo variæ, lineis undulatis nigris, maculis nigro ex parte marginatis, striga basali lutea; posticæ cinereo-fuscæ.

Noctua filigramma, *Esp. Schmett.* v. 396, pl. 130, f. 4. *Frey. Beit.* pl. 137, f. 3. *Dup. Hist. Nat. Lép. Fr.* vi. 413, pl. 98?

Noctua Polymita, *Wien. Verz.* H. 4. *Fabr. Ent. Syst.* iii. 2, 188? *Hübn. Eur. Schmett. Noct.* pl. 48.

Noctua flavivibica, *Hübn. Texte.*

Miselia filigramma, *Treit. Schmett.* v. 19; *Suppl.* x. 51.

Var. **Dianthæcia xanthofusca**, *Guen. Ind.* 243.

Polymixis Polymita, *Hübn. Verz. Schmett.* 205, 2059.

Dianthæcia filigramma, *Boisd. Ind. Méth.* 125, 992. *Herr.-Schæff. Schmett. Eur.* ii. 250, 199, pl. 90, f. 465. *Guen. Noct.* ii. 23, 695.

Germany. Tyrol. Hungary. Styria.

a, b. Europe. From M. Becker's collection.

10. Dianthæcia xanthocyanea.

Cinereo-fusca; thorax fasciis duabus obliquis ochraceis; alæ anticæ ochraceo variæ, lineis undulatis nigris albo marginatis, macularum marginibus strigisque marginalibus lanceolatis albis; posticæ cinereæ, linea margineque fuscis.

Noctua xanthocyanea, *Hübn. Eur. Schmett. Noct.* 640.
Mimetes xanthocyanea, *Hübn. Verz. Schmett.* 210, 2104.
Dianthæcia filigramma, *Boisd. Ind. Méth.* 125, 992. *Guen. Ind.* 243.
Dianthæcia xanthocyanea, *Dup. Hist. Nat. Lép. Fr. Suppl.* vii. 526, pl. 90. *Herr.-Schæff. Schmett. Eur.* ii. 250, 198, pl. 90, f. 464. *Guen. Noct.* ii. 23, 696.

Europe.

Var. *Minor; alæ anticæ fuscæ, gutta basali ochracea, lineis undulatis, macularum marginibus guttisque marginalibus albis.*

Dianthæcia conspurcata, *Herr.-Schæff. Schmett. Eur.* ii. 251, 202, pl. 90, f. 463, 470.

South Russia.

11. Dianthæcia tephroleuca.

Fusco-cinerea; alæ anticæ lineis transversis undulatis nigricantibus et canescentibus, linea submarginali angulosa, maculis nigricante et canescente marginatis vix distinctis; posticæ cinerascentes.

Dianthæcia tephroleuca, *Boisd. Ind. Méth.* 125, 999. *Dup. Hist. Nat. Lép. Fr. Suppl.* vi. 244, pl. 22, f. 5. *Herr.-Schæff. Schmett. Eur.* ii. 250, 200; ii. pl. 28, f. 91; pl. 140, f. 469. *Guen. Noct.* ii. 24, 697.
Polia tephroleuca, *Boisd. Ann. Soc. Ent. Fr.* iii. 374, pl. 14, f. 4.

Chamouni.

12. Dianthæcia Magnolii.

Fusca; thorax albo varius; abdomen cinereo-fuscum; alæ anticæ lineis undulatis albis nigrisque, lituris costalibus, macularum marginibus guttisque marginalibus albis; posticæ cinereæ, linea margineque fuscis, ciliis pallidis.

Dianthæcia Magnolii, *Boisd. Ind. Méth.* 125, 990. *Dup. Hist. Nat. Lép. Fr. Suppl.* vi. 241, pl. 22, f. 4. *Herr.-Schæff. Schmett. Eur.* ii. 250, 201, pl. 15, f. 71. *Guen. Noct.* ii. 24, 698.

Noctua Numosa, *Frey. Beit.* iv. pl. 351, f. 3. *Exerm. Faun. Volg.-Ural.* 232.

South France. Sicily. South Russia.

13. Dianthæcia albimacula.

Fusca; thorax fascia interrupta antica vittisque lateralibus arcuatis nigris albo marginatis; alæ anticæ macula basali, orbiculari et reniformi discalibus maculaque posteriore albis nigro marginatis, lineis quatuor transversis angulosis nigris albo marginatis, ciliis albo variis; posticæ cinerascentes, margine fusco, ciliis albis.

———, *Engr. Pap. d'Eur.* 337, a, b.

Noctua albimacula, *Bork. Eur. Schmett.* iv. 60.

Miselia albimacula, *Treit. Schmett.* iv. 391. *Steph. Ill. Brit. Ent. Haust.* iii. 20.

Noctua compta, *Esp. Schmett.* iv. pl. 117, A, f. 7.

Noctua concinna, *Hübn. Eur. Schmett. Noct.* pl. 51. *Dup. Hist. Nat. Lép. Fr.* vi. 359, pl. 95.

Harmodia compta? *Hübn. Verz. Schmett.* 207, 2074.

Dianthæcia albimacula, *Guen. Ann. Soc. Ent. Fr.* iii. 197; *Noct.* ii. 15, 699. *Herr.-Schæff. Schmett. Eur.* ii. 251, 204. *Boisd. Ind. Méth.* 124, 987.

a. England.
b—d. Europe. From M. Becker's collection.

14. Dianthæcia conspersa.

Caput et thorax alba, nigro varia; abdomen pallidissime cinerascens; alæ anticæ nigro-cineræ, plagis duabus anticis, vitta interrupta postica lineaque transversa exteriore undulata ad apicem dilatata albis; posticæ pallidissime cinerascentes, margine latissimo purpureo-fusco.

———, *Engr. Pap. d'Eur.* 332, d—g.

Phalæna-Bombyx conspersa, *Gmel. ed. Syst. Nat.* i. 5, 2444, 587.

Noctua conspersa, *Wien. Verz.* 71, 6. *Bork. Eur. Schmett.* iv. 151, 61. *Esp. Schmett.* iv. pl. 119, f. 5. *Hübn. Eur. Schmett. Noct.* pl. 11, f. 52. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 95, f. 1.
Bombyx annulata, *Fabr. Sp. Ins.* ii. 207, 157; *Mant. Ins.* ii. 134, 218; *Ent. Syst.* iii. 1, 483, 238.
Harmodia conspersa, *Hübn. Verz. Schmett.* 207, 2075.
Noctua (Miselia) conspersa, *Meig. Syst. Besch.* iii. 123, 74, pl. 102, f. 6.
Dianthæcia conspersa, *Boisd. Ind. Méth.* 124, 988. *Herr.-Schæff. Schmett. Eur.* ii. 251, 205. *Guen. Noct.* ii. 25, 700.
Miselia conspersa, *Treit. Schmett.* v. 387, 1.
Noctua compta, *Haw. Lep. Brit.* 54.
Miselia compta, *Steph. Ill. Brit. Ent. Haust.* iii. 26.

a—m. England. From Mr. Stephens' collection.
n—p. England.
q—s. Europe. From M. Becker's collection.
t, v. France.
u. ———?

15. Dianthæcia compta.

Fusco-cinerea; caput et thorax albo varia; abdomen cinereum; pedes albo fasciati; alæ anticæ glauco tinctæ, cervino notatæ, lineis transversis undulatis atris, fascia lata media antice divisa, litura basali lineaque submarginali albis; posticæ pallide cinereæ, margine lato fuscescente, ciliis albidis.

——— ———, *Engr. Pap. d'Eur.* 232, a—c.
Phalæna-Noctua compta, *Gmel. ed. Syst. Nat.* i. 5, 2570, 1155.
Noctua compta, *Wien. Verz.* 70, 5. *Fabr. Mant. Ins.* ii. 169, 225; *Ent. Syst.* iii. 2, 95, 280. *Esp. Schmett.* iv. pl. 119, f. 6. *Bork. Schmett.* iv. 147, 59. *Hübn. Eur. Schmett. Noct.* pl. 11, f. 53. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 95, f. 2.
Dianthæcia compta, *Boisd. Ind. Méth.* 125, 989. *Herr.-Schæff. Schmett. Eur.* ii. 251, 206. *Guen. Noct.* ii. 25, 701.
Harmodia compta, *Hübn. Verz. Schmett.* 207, 2074.
Noctua-Miselia compta, *Meig. Syst. Besch.* iii. 124, 76, pl. 102, f. 7.
Miselia compta, *Treit. Schmett.* v. 389, 2.

a, b. Europe. From M. Becker's collection.
c—e. France.

16. DIANTHÆCIA ARMERIÆ.

Fœm. *Flavescente-cinerea*, D. comptæ *affinis, oviductu apicem versus longiore tenuiore spatulato ; thorax pilis cinereis albisque ; alæ anticæ fascia lata alba maculas orbicularem et reniformem includente ; posticæ pallidæ.*

Dianthæcia Armeriæ, *Boisd. MSS. Guen. Noct.* ii. 26, 702.

South Russia.

North America.

17. DIANTHÆCIA CAPSULARIS.

Cinerea ; thorax lineis transversis nigris ; alæ anticæ lineis undulatis duplicatis strigisque marginalibus lanceolatis nigris, illis albo marginatis, orbiculari alba ; posticæ cinereæ.

Dianthæcia capsularis, *Guen. Noct.* ii. 22, 693.

♂. East Florida. Presented by E. Doubleday, Esq.

South America.

18. DIANTHÆCIA? DELECTANS.

Mas. *Testaceo-fusca ; abdomen testaceum, fasciculis apiceque fuscis ; alæ anticæ lineis duplicatis angulosis nigricantibus, maculis vix conspicuis, plaga exteriore nigricante, macula apicali cervina albido lineata, lunulis marginalibus nigris ; posticæ cinereo-æneæ, marginibus æneo-fuscis.*

Male. Testaceous-brown. Palpi obliquely ascending; third joint not more than than one-fourth of the length of the second. Abdomen testaceous, with brown tufts towards the base, and a brown tip. Fore wings with the transverse lines double, zigzag, blackish; discal spots very indistinct; a large blackish patch beyond the reniform spot, adjoining the apical spot, which is fawn-coloured with whitish lines; marginal lunules black. Hind wings cinereous-æneous, with æneous-brown borders. Length of the body 5 lines; of the wings 12 lines.

♂. Santarem. From Mr. Bates' collection.

19. DIANTHÆCIA? TRIPLAGA.

Mas. *Cana; palpi fusci, suberecti; antennæ subciliatæ; thorax pilis clavatis; abdomen crista dorsali fasciculisque lateralibus nigris; alæ anticæ obscure cinereæ, fasciis duabus latissimis lineaque basali testaceis fusco marginatis, reniformi subquadrata albida; posticæ albidæ, marginibus æneo-fuscis.*

Male. Hoary. Palpi brown, almost erect; third joint conical, not more than one-sixth of the length of the second. Antennæ very indistinctly ciliated. Thorax with club-shaped hairs. Abdomen with a slight dorsal crest, and slight lateral tufts of black hairs. Fore wings dark cinereous, with two very broad irregular testaceous brown-bordered bands, the first communicating with a testaceous brown-bordered line near the base; the second interrupted, submarginal; reniform spot distinguished by a large subquadrate whitish mark; exterior border rather oblique. Hind wings whitish, with brownish æneous borders. Length of the body 6 lines; of the wings 14 lines.

a. Venezuela. From Mr. Dyson's collection.

Africa.

20. DIANTHÆCIA PRÆTERMISSA.

Fœm. *Cinereo-fusca; abdomen cinereum; alæ anticæ margine exteriore vix denticulato, lineis testaceis undulatis incompletis nigro marginatis, orbiculari et reniformi testaceis, æqualibus, sat angustis, illa obliqua; posticæ pallide cinereæ.*

Female. Cinereous-brown. Palpi slightly ascending; third joint conical, not more than one-fourth of the length of the second. Abdomen cinereous, extending a little beyond the hind wings. Fore wings with the lines testaceous, undulating, incomplete, bordered with black; exterior border hardly denticulated; orbicular and reniform spots testaceous, rather narrow; the former oblique, as large as the latter. Hind wings pale cinereous, with broad brownish borders. Length of the body 5 lines; of the wings 12 lines.

a. Cape. From M. Dregé's collection.

21. Dianthæcia ruptilinea.

Cinerea, nigro conspersa; alæ anticæ lituris nonnullis costalibus lineisque incompletis angulosis nigris, maculis discalibus nigricantibus albido marginatis, orbiculari albido lineata, maculis duabus exterioribus nigricantibus, linea submarginali angulosa albida, lunulis marginalibus nigris albido marginatis; posticæ albæ, lunulis marginalibus nigris.

Cinereous. Thorax and fore wings sprinkled with black. Third joint of the palpi less than one-fourth of the length of the second. Antennæ simple. Abdomen hardly extending beyond the hind wings. Hind tibiæ with long spurs. Fore wings entire and moderately oblique along the exterior border, with some black costal marks and some incomplete zigzag black lines; discal spots blackish with whitish borders; orbicular divided by a whitish line; two blackish spots between the reniform and the zigzag whitish submarginal line; a row of black marginal lunules, with whitish borders. Hind wings white, with minute black marginal lunules. Length of the body 6 lines; of the wings 14 lines.

a, b. Port Natal. From M. Gueinzius' collection.

Australia.

22. Dianthæcia?? interferens.

Ferruginea; palpi ex parte nigri; antennæ nigræ; thorax fasciis nigricantibus; alæ anticæ lineis nigris duplicatis undulatis incompletis antice ex parte diffusis, lunulis marginalibus nigris, orbiculari e gutta pallida, reniformi e litura nigra; posticæ subferrugineo-cinereæ, ciliis canis.

Ferruginous. Palpi porrect, partly black, extending a little beyond the head; third joint very minute, not one-sixth of the length of the second. Antennæ black. Thorax with blackish bands. Abdomen wanting. Fore wings with the transverse lines black, double, undulating, incomplete and irregular, and partly diffuse in front; a row of black marginal lunules; discal spots almost obsolete, the orbicular distinguished by a pale dot, the reniform by a black mark. Hind wings cinereous, with a slight ferruginous tinge, and with hoary ciliæ. Length of the body 5 lines; of the wings 12 lines.

a. Adelaide. Presented by the Entomological Club.

Genus 3. HECATERA.

Corpus sat validum. Proboscis mediocriter longa. Palpi pilosi, porrecti, caput vix superantes; articulus 3us minimus. Antennæ simplices, corporis dimidio multo longiores. Abdomen alas posticas plus minusve superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subconvexo mediocriter obliquo.

Polia, p., *Ochs.; Treit.; Boisd.; Steph.; Herr.-Schæff.*
Xanthopastis et Æthria, p., *Hübn. Verz. Schmett.*
Hecatera, *Guen. Noct.* ii. 27.

Body moderately stout. Proboscis moderately long. Palpi pilose, porrect, hardly extending beyond the head; third joint very minute, not more than one-sixth of the length of the second. Antennæ simple, much more than half the length of the body. Abdomen extending a little, or as much as one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, slightly convex, and moderately oblique along the exterior border.

A. Alæ anticæ luteo variæ.
  A. Alæ anticæ obscuræ. - - - dysodea, *Wien. Verz.*
  B. Alæ anticæ pallidæ. - - - - luteocincta, *Ramb.*
B. Alæ anticæ luteo perparum notatæ. - caduca, *Herr.-Schæff.*
C. Alæ anticæ non luteo notatæ.
  A. Alæ anticæ viridi variæ. - - - Corsica, *Ramb.*
  B. Alæ anticæ non viridi variæ.
    A. Alæ anticæ fasciatæ.
      a. Thorax albidus. - - - serena, *Wien. Verz.*
      b. Thorax cinereus, antice albidus. - monticola, *Dup.*
    B. Alæ anticæ vix fasciatæ. - - - - Cappa, *Hübn.*

1. Hecatera Corsica.

Alæ anticæ subcinereæ, albo fusco et viridi variæ, lineis transversis dentatis nigris; posticæ fuscæ, striga albida transversa obsoleta.

Polia Corsica, *Ramb. Ann. Soc. Ent. Fr.* i. 279, pl. 9, f. 3.
Dianthæcia Corsica, *Boisd. Ind. Méth.* 125, 1000.
Hecatera Corsica, *Guen. Noct.* ii. 28, 703.

Corsica. Madrid.

2. Hecatera luteocincta.

Alæ anticæ albido-subcinereæ fusco variæ, strigis quatuor transversis sinuato dentatis, externa, maculis ordinariis basique flavo notatis.

Polia luteocincta, *Ramb. Ann. Soc. Ent. Fr.* iii. 382, pl. 8, f. 1. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 278, pl. 26. *Boisd. Ind. Méth.* 126, 1007. *Herr.-Schæff. Eur. Schmett.* ii. 267, 260, pl. 75, f. 384.

Hecatera luteocincta, *Guen. Noct.* ii. 28, 704.

South France.

3. Hecatera dysodea.

Fusco-cinerea; thorax albido luteoque varius; alæ anticæ lineis transversis undulatis albidis et nigricantibus luteo notatis, maculis non bene determinatis; posticæ pallide cinereæ, margine lato fuscescente, ciliis albidis.

——— ———, *Engr. Pap. d'Eur.* 350, a, i. *Wilk.* pl. 14?

Noctua dysodea, *Wien. Verz.* 72, 5. *Hübn. Eur. Schmett. Noct.* pl. 10, f. 47. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 98, f. 2.

Noctua flavicincta minor, *Esp. Schmett.* iv. pl. 153, f. 6, 7.

Noctua chrysozona, *Bork. Eur. Schmett.* iv. 264, 113.

Noctua (Polia) dysodea, *Meig. Syst. Besch.* iii. 132, 90, pl. 101, f. 7.

Noctua Ranunculina, *Haw. Lep. Brit.* 64.

Noctua Spinaciæ, *View.*

Polia dysodea, *Treit. Schmett.* v. 16, 4. *Dup. Hist. Nat. Lép. Fr. Suppl.* v. pl. 1, f. 2. *Steph. Ill. Brit. Ent. Haust.* iii. 32. *Boisd. Ind. Méth.* 126, 1006. *Herr.-Schæff. Eur. Schmett.* ii. 266, 258.

Xanthopastis dysodea, *Hübn. Verz. Schmett.* 211, 2108.

Hecatera dysodia, *Guen. Noct.* ii. 28, 705.

a—i. England. From Mr. Stephens' collection.
j—n. England.
o—q. Europe. From M. Becker's collection.

4. Hecatera caduca.

Cinerea; abdomen albidum; alæ anticæ perparum ochraceo notatæ, lineis transversis undulatis albidis nigro marginatis, linea intermedia nigra, maculis albido nigroque marginatis; posticæ albidæ, margine lato cinereo.

Polia caduca, *Herr.-Schæff. Eur. Schmett.* ii. 266, 259, pl. 94, f. 484.
Hecatera caduca, *Guen. Noct.* ii. 29, 706.
Isle of Oute.

5. Hecatera serena.

Albida; thorax fusco varius; abdomen canescens; alæ anticæ lineis transversis paucis incompletis nigris, fascia lata fusca antice dilatata maculas orbicularem et reniformem includente, striga costali subapicali nigricante, margine exteriore cinereo; posticæ cinereæ, margine ex parte ciliisque albis.

——— ———, *Engr. Pap. d'Eur.* 352, e, f.
Phalæna-Noctua serena, *Gmel. ed. Syst. Nat.* i. 5, 2576, 1176.
Noctua serena, *Wien. Verz.* 84, 4. *Fabr. Mant. Ins.* ii. 171, 242; *Ent. Syst.* iii. 2, 171, 301. *Esp. Schmett.* iv. pl. 166, f. 4. *Bork. Eur. Schmett.* iv. 270, 115. *Hübn. Eur. Schmett. Noct.* pl. 11, f. 54. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 98, f. 3. *Haw. Lep. Brit.* 66. *Frey. Beit.* i. pl. 87. *View.* 107.
Noctua Hieracii, *Scriba*, pl. 13, f. 1, 2.
Noctua Par, *Donov. Brit. Ins.* x. pl. 338.
Noctua placida, *Esp. Schmett.* pl. 166, f. 5, 6.
Noctua (Polia) serena, *Meig. Syst. Besch.* iii. 132, 91, pl. 100, f. 6.
Æthria serena, *Hübn. Verz. Schmett.* 218, 2182.
Polia serena, *Treit. Schmett.* v. 12, 3. *Boisd. Ind. Méth.* 126, 1008. *Herr.-Schæff. Eur. Schmett.* ii. 266, 257. *Steph. Ill. Brit. Ent. Haust.* iii. 32.
Hecatera serena, *Guen. Noct.* ii. 29, 707.

a. England. Presented by H. Doubleday, Esq.
b—j. England. From Mr. Stephens' collection.
k. England. From Mr. Stevens' collection.
l, m. England.
n—p. Europe. From M. Becker's collection.

6. Hecatera monticola.

Cinerea; caput et thorax anticus albida; abdomen testaceum; alæ anticæ fascia latissima cinerea nigro varia albo notata; posticæ pallide testaceæ, fascia margineque obscurioribus.

Polia monticola, *Dup. Hist. Nat. Lép. Fr.* iii. 314, pl. 92, f. 4. *Boisd. Ind. Méth.* 126, 1009.

Hecatera monticola, *Guen. Noct.* ii. 31, 710.
Hecatera laudabilis ?

South France.

7. Hecatera Cappa.

Alba ; caput et thorax nigro guttata ; thorax lineolis nigris ; alæ anticæ lineis transversis undulatis nigris, linea submarginali angulosa, maculis nigro marginatis, plaga discali inter maculas maculaque costali subapicali cinereis ; posticæ margine diviso pallide fuscescente.

Noctua Cappa, *Hübn. Eur. Schmett. Noct.* pl. 95, f. 447. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 99, f. 5.
Polia Cappa, *Treit. Schmett.* v. 7, 1. *Boisd. Ind. Méth.* 126, 1010. *Herr.-Schæff. Eur. Schmett.* ii. 267, 262.
Antitype Cappa, *Hübn. Verz. Schmett.* 212, 2116.
Noctua (Polia) Cappa, *Meig. Syst. Besch.* iii. 130, 86, pl. 101, f. 9.
Hecatera Cappa, *Guen. Noct.* ii. 31, 711.

a, *b*. Europe. From M. Becker's collection.
c. Europe. From Dr. Frivaldsky's collection.

North America.

8. Hecatera laudabilis.

Albo-viridis ; thorax nigro fasciatus ; abdomen cinerascens ; alæ anticæ macula basali, lituris costalibus lineisque undulatis albis nigro marginatis, plaga maxima discali fuscescente orbicularem et reniformem includente ; posticæ albæ, margine fusco.

Hecatera laudabilis, *Guen. Noct.* iii. 30, 709.

a, *b*. East Florida. Presented by E. Doubleday, Esq.
c, *d*. ———? From Mr. Milne's collection.

South America.

9. Hecatera olivocincta.

Roseo-alba ; alæ anticæ lituris nebulosis vix determinatis, lineis duabus medianis nigris interruptis, umbra mediana latissima recta lineaque submarginali valde sinuata muscoso viridibus, maculis duabus posticis nigris vagis, orbiculari et reniformi indistinctis, illa rotunda punctum viride includente, guttis marginalibus nigris, ciliis olivaceis albisque ; posticæ flavescente-albidæ, fascia lineaque marginali nigricantibus.

Hecatera olivocincta, *Guen. Noct.* ii. 30, 708.
Brazil.

Genus 4. PHOROCERA.

Corpus robustum. Proboscis longa, valida. Palpi breves, villosi, ascendentes; articulus 3us ovalis, mediocris, squamosus. Antennæ cylindricæ, filiformes, nudæ. Thorax rotundatus, crassus, villoso squamosus. Abdomen brevissimum, conico obtusum, lateribus pilosis. Pedes breves; tibiæ calcaribus longis; tarsi graciles. Alæ crassæ, ciliis densis squamosis; anticæ margine exteriore integro.

Metopoceras, *Guen. Ann. Soc. Ent. Fr. 2me Sér.* viii. *Bull.* xviii.
Phorocera, *Guen. Noct.* ii. 31.
Polia, p., *Dup.; Boisd.; Herr.-Schæff.*

Body stout. Proboscis long, stout. Palpi short, villose, ascending; third joint ovate, squamose, of moderate length. Antennæ cylindrical, filiform, bare, more than half the length of the body. Abdomen very short, conic-obtuse; sides pilose. Legs short, moderately stout; hind tibiæ with four long slender spurs; tarsi slender. Wings stout, moderately broad, with thick squamose ciliæ. Fore wings straight in front, somewhat rounded at the tips, slightly convex, and moderately oblique along the exterior border, which is not denticulated.

1. Phorocera Canteneri.

Ferrugineo-fusca; abdomen fusco-cinereum; alæ anticæ lineis transversis angulatis nigris, maculis ferrugineis, orbiculari rotunda; posticæ cinereæ, margine lato fusco.

Polia Canteneri, *Dup. Rev. Ent.* i. 37, pl. 3; *Suppl.* iii. 267, pl. 25, f. 2. *Boisd. Ind. Méth.* 126, 1005.
Noctua Canteneri, *Geyer, Eur. Schmett.* f. 824.
Phorocera Canteneri, *Guen. Noct.* ii. 32, 712.

Hyéres. Spain.

2. Phorocera felicina.

Alæ anticæ ferrugineo-rubidæ, maculis ordinariis lineisque pallide cinereis; posticæ rufulæ; antennæ filiformes, subcrassæ; palpi brevissimi, villosi; thorax villosus; abdomen lævæ.

Polia felicina, *Donzel*, *Ann. Soc. Ent. Fr. 2me Sér.* ii. 199, pl. 6, No. 2. *Herr.-Schæff. Schmett. Eur.* ii. pl. 94, f. 485.
Phorocera felicina, *Guen. Noct.* ii. 33, 713.
Marseilles.

Genus 5. POLIA.

Corpus sat robustum. Proboscis mediocriter longa. Palpi porrecti, caput vix superantes; articulus 3us minimus. Antennæ corporis dimidio valde longiores. Abdomen alas posticas paullo aut triente superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore sat obliquo. *Mas.*—Antennæ subciliatæ.

Polia, *Guen. Noct.* ii. 33.
Polia, p., *Treit.; Dup.; Boisd.; Steph.; Herr.-Schæff.*
Antitype, Polymixis, p., Xanthopastis, p., et Exarnis, p., *Hübn. Verz. Schmett.*

Body rather stout. Proboscis moderately long. Palpi porrect, hardly extending beyond the head; third joint very minute, not more than one-sixth of the length of the second. Antennæ very much more than half the length of the body. Abdomen extending a little or as much as one-third of its length beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, rather oblique along the exterior border. *Male.*—Antennæ minutely ciliated.

A. Alæ anticæ non testaceæ aut cervinæ.
  A. Alæ anticæ albidæ aut cinereæ aut fuscæ, lineis pallidioribus aut obscurioribus.
    A. Alæ anticæ non luteo variæ.
      a. Alæ anticæ albæ aut cinereæ.
        i. Alæ anticæ litura discali nigra. - - Chi, *Linn.*
        ii. Alæ anticæ litura nulla nigra.
          * Alæ anticæ non viridi-cinereæ.
            † Alæ posticæ albæ aut albidæ. canescens, *Boisd.*
            †† Alæ posticæ cinereæ.
              ‡ Alæ anticæ non glaucescentes. platinea, *Treit.*
              ‡‡ Alæ anticæ subglaucescentes. cærulescens, *Guen.*

** Alæ anticæ viridi-cinereæ. - suda, *Geyer.*
b. Alæ anticæ fuscæ. - - - - Polymita, *Linn.*
B. Alæ anticæ luteo variæ.
a. Alæ anticæ lineatæ.
i. Alæ anticæ nigro lineatæ.
* Alæ obscuriores. - - nigrocincta, *Ochs.*
** Alæ pallidiores. - - flavocincta, *Wien. Verz.*
ii. Alæ anticæ non nigro lineatæ.
* Alæ anticæ ad apices plus rotundatæ.
rufocincta, *Hübn.*
** Alæ anticæ ad apices minus rotundatæ.
anilis, *Boisd.*
b. Alæ anticæ vix lineatæ. - - - vetula, *Boisd.*
B. Alæ anticæ pallide murinæ, sublineatæ.
cæcimacula, *Wien. Verz.*
B. Alæ anticæ cervinæ. - - - argillaceago, *Hübn.*

1. Polia Chi.

Alba; thoraæ lineis duabus obliquis nigricantibus; alæ anticæ guttis costalibus lineisque transversis duplicatis incompletis fuscis, litura χ discali guttisque exterioribus nigris; posticæ apud margines fusco notatæ.

——— ———, *Albin, Ins.* pl. 83, f. C, D. *Roës. Ins.* i. 2, pl. 13. *Geoff. Ins. Par.* ii. 11, 156, 93. *Engr. Pap. d'Eur.* 354, a—f.

Phalæna-Noctua Chi, *Linn.* 1180. *Gmel. ed. Syst. Nat.* i. 5, 2560, 136.

Noctua Chi, *Wien. Verz.* 72, 3. *Fabr. Sp. Ins.* ii. 236, 130; *Mant Ins.* ii. 174, 258; *Ent. Syst.* iii. 2, 846, 136. *Esp. Schmett.* iv. pl. 114, f. 1—3. *Bork. Eur. Schmett.* iv. 267, 14. *Hübn. Eur. Schmett. Noct.* pl. 10, f. 49. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 99, f. 3. *Donov. Brit. Ins.* pl. 406. *Haw. Lep. Brit.* 65.

Polia Chi, *Treit. Schmett.* v. 9, 2. *Boisd. Ind. Méth.* 126, 1011. *Steph. Ill. Brit. Ent. Haust.* iii. 34. *Herr.-Schæff. Eur. Schmett.* ii. 267, 261. *Guen. Noct.* ii. 35, 714.

Antitype Chi, *Hübn. Verz. Schmett.* 212, 2115.

Noctua (Polia) Chi, *Meig. Handb.* 163, 38; *Syst. Besch.* iii. 130, 87, pl. 101, f. 8.

a—h. England. From Mr. Stephens' collection.
i, j. England.
k, l. Scotland. From Mr. Foxcroft's collection.
m, n. Europe. From M. Becker's collection.
o, p. Europe.

2. Polia suda.

Viridi-cinerea; abdomen cinereum; alæ anticæ lineis transversis undulatis guttisque exterioribus nigris, maculis nigro marginatis; posticæ albæ.

Noctua suda, *Geyer, Eur. Schmett.* f. 802.
Polia suda, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 255, pl. 24, f. 3. *Boisd. Ind. Méth.* 126, 1013. *Guen. Noct.* ii. 35, 715. *Herr.-Schæff. Eur. Schmett.* ii. 259, 232, pl. 93, f. 480.

Valais.

3. Polia canescens.

Canescente-alba; abdomen canescens; alæ anticæ fusco subconspersæ guttis marginalibus lineisque transversis undulatis incompletis pallide fuscescentibus, lineis duabus transversis (una marginali) guttularibus nigricantibus; posticæ albæ.

Polia canescens, *Boisd. Ann. Soc. Linn.* vi. 113, f. 3; *Ind. Méth.* 126, 1012. *Dup. Hist. Nat. Lép. Fr. Suppl.* vi. 422, pl. 99, f. 3. *Treit. Suppl.* 58. *Herr.-Schæff. Schmett. Eur.* ii. pl. 91, f. 466. *Guen. Noct.* ii. 35, 716.
Noctua (Polia) canescens, *Meig. Syst. Besch.* iii. 131, 88, pl. 102, f. 1.

Var. *Cinerea; thoraxe linea transversa undulata nigra; alæ anticæ lineis transversis et macularum marginibus nigricantibus bene determinatis; posticæ albidæ, fasciis duabus cinereis.*

Noctua pumicosa, *Hübn. Eur. Schmett. Noct.* f. 787, 788.
Polia pumicosa, *Treit. Suppl.* 57. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 282, pl. 26. *Boisd. Ind. Méth.* 126, 1014.

Var. *Alæ anticæ nebulosæ subcinereæ, atomis nigris adspersæ, lineis nigris obsoletis.*

Polia Asphodeli, *Ramb. Ann. Soc. Ent. Fr.* i. 281, pl. 9, f. 4. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 282, pl. 26. *Herr.-Schæff. Eur. Schmett.* ii. 260, 237, pl. 95, f. 488—490.

Corsica.

a—h. Europe. From M. Becker's collection.
i. Europe.

4. Polia platinea.

Cinerea; abdomen canescens; alæ anticæ lineis transversis undulatis maculisque subobsoletis, guttis costalibus lunulisque marginalibus nigricantibus, macula discali albida; posticæ pallide cinereæ, ciliis albidis.

Polia platinea, *Treit. Schmett.* ii. 34. *Dup. Hist. Nat. Lep. Fr. Suppl.* iii. 444, pl. 39. *Herr.-Schæff. Eur. Schmett.* ii. 261, 238, pl. 8, f. 40; pl. 95, f. 487. *Boisd. Ind. Méth.* 127, 1017. *Guen. Noct.* ii. 36, 717.

France. Austria. South Switzerland.

5. Polia nigrocincta.

Alba, nigro conspersa; abdomen albidum; tarsi nigri, albo-cincti; alæ anticæ fascia diffusa strigisque transversis nigris, guttis discalibus et submarginalibus luteis; posticæ maris *albæ,* fœminæ *nigricantes.*

Polia nigrocincta, *Ochs. Syst. Gloss. Treit. Schmett.* v. 31; vi. 397; *Suppl.* 59. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 257, pl. 24, f. 4 (fœm.). *Boisd. Ind. Méth.* 127, 1019. *Guen. Noct.* ii. 37, 718. *Herr.-Schæff. Eur. Schmett.* ii. 260, 235, pl. 94, f. 482.

Var. *Cana; alæ anticæ guttis discalibus lineaque transversa undulata submarginali nigro intus marginata flavis, atomis fasciaque diffusa nigris; posticæ albæ, apud margines subcinereæ.*

Noctua xanthomista, *Hübn. Eur. Schmett. Noct.* f. 647.
Noctua nigrocincta, *Frey. Beit.* iii. pl. 243.

a—h. Europe. From M. Becker's collection.

6. Polia argillaceago.

Pallide cervina; alæ anticæ lineis transversis undulatis et punctatis guttisque costalibus nigris, maculis indistinctis; posticæ albæ.

Noctua argillaceago, *Hübn. Eur. Schmett. Noct.* f. 682.
Polia venusta, *Boisd. Ind. Méth.* 127, 1027. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 284, pl. 26. *Herr.-Schæff. Eur. Schmett.* ii. 262, 240, pl. 12, f. 58, 59.

Polia argillaceago, *Guen. Noct.* ii. 37, 719.

South France. South Russia.

7. Polia Polymita.

Fusco-olivacea; thorax albo nigroque varius; alæ anticæ fasciis undulatis aut angulosis maculisque albis nigro marginatis; posticæ albæ, fascia submarginali cinerascente, lunulis marginalibus nigris.

——— ———, *Deg. Ins.* ii. 412, pl. 6. *Engr. Pap. d'Eur.* f. 439, a, b.

Phalæna-Noctua Polymita, *Linn. Syst. Nat.* 855, 180; *Faun. Suec.* 1217. *Gmel. ed. Syst. Nat.* i. 5, 2543, 180.

Noctua Polymita, *Wien. Verz.* 72, 4. *Fabr. Sp. Ins.* ii. 225, 84; *Mant. Ins.* ii. 155, 145; *Ent. Syst.* iii. 2. *Esp. Schmett.* iv. pl. 170, f. 4. *Scriba, Ins.* pl. 18, f. 5. *Bork. Eur. Schmett.* iv. 116, bis. *Frey. Beitr.* iii. pl. 261. *Dup. Hist. Nat. Lép. Fr.* vi. 417, pl. 99.

Noctua ridens, *Hübn. Eur. Schmett. Noct.* f. 20.

Polymixis Polymita, *Hübn. Verz. Schmett.* 205, 2059. *Treit. Schmett.* v. 24. *Boisd. Ind. Méth.* 127, 1025.

Polia polymita, *Herr.-Schæff. Eur. Schmett.* ii. 261, 239. *Guen. Noct.* ii. 38, 720.

Xanthopastis Polymita, *Hübn. Verz. Schmett.* 211, 2109.

a. Europe. Presented by E. Doubleday, Esq.
b. Europe. From M. Becker's collection.

8. Polia flavocincta.

Cana, nigro conspersa; alæ anticæ lineis transversis undulatis nigricantibus, macularum marginibus, guttis submarginalibus et linea postica luteis; posticæ subcinereæ, macula discali fasciisque duabus cinereis.

——— ———, *Roës. Ins.* i. pl. 55, f. 1—3. *Wilk.* pl. 14. *Engr. Pap. d'Eur.* 349, c—e.

Phalæna-Noctua flavocincta, *Gmel. ed. Syst. Nat.* i. 5, 2571, 1159.

Noctua flavocincta, *Wien. Verz.* 72, 2. *Fabr. Mant. Ins.* ii. 178, 277; *Ent. Syst.* iii. 2, 114, 444. *Esp. Schmett.* iv. pl. 153, f. 1—3. *Bork. Eur. Schmett.* iv. 258, 111. *Hübn. Eur. Schmett. Noct.* f. 46. *Haw. Lep. Brit.* 63. *Donov. Brit. Ins.* x. pl. 334. *Dup. Hist. Nat. Lép. Fr.* vi. 401, pl. 98.

Noctua dysodea, *Esp. Schmett.* iv. pl. 153, f. 4—6. *Bork. Eur. Schmett.* iv. 262, 12.

Xanthopastis flavicincta, *Hübn. Verz. Schmett.* 211, 2107.
Noctua (Polia) flavicincta, *Meig. Syst. Besch.* iii. 131, 89, pl. 101, f. 6.
Polia flavicincta, *Treit. Schmett.* v. 27, 9. *Steph. Ill. Brit. Ent. Haust.* iii. 32. *Boisd. Ind. Méth.* 127, 1023. *Herr.-Schæff. Eur. Schmett.* ii. 259, 234. *Guen. Noct.* ii. 39, 722.
Var. Polia meridionalis, *Boisd. Ind. Méth.* 127, 1023.

Corsica.

Var. Polia calvescens, *Boisd. Ind. Méth.* 127, 1024.

Sicily.

a—f. England. From Mr. Stephens' collection.
g, i. England.
j—l. Europe. From M. Becker's collection.

9. Polia cærulescens.

Cana; alæ anticæ cinereo subnebulosæ, testaceo subobsolete notatæ, maculis indistinctis, fascia diffusa glaucescente, guttis marginalibus nigris; posticæ subcinereæ, ciliis albis.

Polia cærulescens, *Guen. Ind. Méth.* 127, 1021; *Noct.* ii. 40, 723. *Dup. Hist. Nat. Lép. Fr. Suppl.* vii. 95, pl. 58. *Herr.-Schæff. Eur. Schmett.* ii. 260, 236, pl. 8, f. 38, 39.

South France.

10. Polia rufocincta.

Albida; alæ anticæ fasciis duabus latis incompletis glaucocinereis, strigis maculisque exterioribus luteis; posticæ fascia diffusa margineque cinerascentibus.

Var. *Cinerea; alæ anticæ maculis fasciisque obscurioribus indistinctis ex parte albido notatis.*

Noctua rufocincta, *Hübn. Eur. Schmett. Noct.* f. 747.
Polia rufocincta, *Boisd. Ind. Méth.* 127, 1022. *Dup. Hist. Nat. Lép. Fr. Suppl.* vi. 259, pl. 24, f. 3, bis. *Herr.-Schæff. Eur. Schmett.* ii. 259, 233, pl. 8, f. 37; pl. 94, f. 483. *Guen. Noct.* ii. 41, 724.

France. Switzerland.

11. Polia anilis.

P. ruficinctæ *affinis; major; alæ anticæ ad apices minus rotundatæ, albido cinereoque variæ, medio obscuriores subnebulosæ; posticæ albidæ, margine fuscescente.*

Polia anilis, *Boisd. Ind. Méth.* 127, 1020. *Dup. Hist. Nat. Lép. Fr. Suppl.* vii. 218, pl. 69, f. 1. *Herr.-Schæff. Eur. Schmett.* ii. 264, 252, pl. 75, f. 385. *Guen. Noct.* i. 42, 725.

South-East France. Valais.

12. Polia vetula.

Alba; alæ anticæ nigro conspersæ, fasciis testaceo fuscescentibus subobsoletis, reniformi maxima, orbiculari subobsoleta, macula postica fusca testaceo submarginata, punctis marginalibus nigris; posticæ nigro vix conspersæ, punctis marginalibus nigris.

Polia vetula, *Boisd. Ind. Méth.* 127, 1018. *Dup. Hist. Nat. Lép. Fr. Suppl.* vii. 93, pl. 58, f. 4. *Herr.-Schæff. Schmett. Eur.* ii. pl. 22, f. 108. *Guen. Noct.* ii. 43, 726.

South France.

13. Polia cæcimacula.

Pallide murina, nigro confertim conspersa; alæ anticæ maculis discalibus (reniformi magna extus subincisa) lineisque duabus exterioribus transversis undulatis pallidioribus fusco marginatis, strigis duabus transversis interioribus discalibus punctisque submarginalibus nigricantibus; posticæ nigro-cinereæ.

——— ———, *Engr. Pap. d'Eur.* 415, d—f.

Phalæna-Noctua cæcimacula, *Gmel. ed. Syst. Nat.* i. 5, 2541, 1025.

Noctua cæcimacula, *Wien. Verz.* 81, 14. *Fabr. Mant. Ins.* ii. 158; *Ent. Syst.* iii. 2, 72, 204. *Esp. Schmett.* iv. Texte. *Bork. Eur. Schmett.* iv 565, 233. *Dup. Hist. Nat. Lép. Fr.* vi. 69, pl. 77. *Hübn. Eur. Schmett. Noct.* f. 137.

Noctua millegrana, *Esp. Schmett.* iv. pl. 150, f. 1; pl. 187, f. 1—7.

Noctua respersa, *Brahm, Ins.* 403.

Exarnis cæcimacula, *Hübn. Verz. Schmett.* 225, 2260.

Noctua (Orthosia) cæcimacula, *Meig. Syst. Besch.* iii. 111, 52, pl. 98, f. 4.

Orthosia cæcimacula, *Treit. Schmett.* ii. 202. *Boisd. Ind. Méth.* 140, 1128. *Herr.-Schæff. Eur. Schmett.* ii. 200, 58.
Polia cæcimacula, *Guen. Noct.* ii. 43, 727.

a—e .Europe. From M. Becker's collection.

Uncertain Species.

14. Polia? punctiocosta.

Alæ anticæ cano, cinereo fuscoque variæ, punctis tribus costalibus maculaque ordinaria anteriore majore albis; posticæ fuscæ, basi dilutiores.

Polia puncticosta, *Zett. Ins. Lapp.* 942, 4.

Lapland.

15. Polia? prolixa.

Alæ anticæ cano, fusco cinereoque variæ, maculis duabus ordinariis solito majoribus; posticæ fuscæ, fimbria alba.

Polia prolixa, *Zett. Ins. Lapp.* 942, 1.

Lapland. N. Sweden. Greenland.

North America.

16. Polia difflua.

Mas. *Fusca; alæ anticæ strigis nonnullis transversis guttisque apicalibus nigris, ocellis duobus discalibus fasciisque subapicalibus arcuatis pallide fuscis; posticæ cinereæ, basi pallidiores.*

Exarnis difflua (Noctua genuina, Graphiphora obsoleta), *Geyer, Zeitr. Samml. Exot. Schmett.* 9, 411, f. 821, 822.

Labrador.

South America.

17. Polia? Politia.

Albida; alæ anticæ lineis transversis fasciaque obliqua exteriore cervinis, lineis tribus transversis strigulisque submarginalibus obliquis nigris; posticæ cervino marginatæ.

Phalæna-Noctua Politia, *Cram. Pap. Exot.* iv. 41, pl. 309, f. F.
Symmerista Politia, *Hübn. Verz. Schmett.* 248, 2459.

Surinam.

Asia.

18. Polia Stevensii.

Canescens; thorax antice albus, guttis duabus lateralibus nigris; alæ anticæ cinereo conspersæ, spatio mediano necnon lituris basalibus et submarginalibus saturate olivaceo-cinereis, lineis distinctis duplicatis, submarginali angulosa, maculis albis bene determinatis disco cinereis, macula costali basali quadrata alba cinereo bilineata, punctis marginalibus quadratis crassis; posticæ nigricante cinereæ, strigis marginalibus crassis obscurioribus, litura apud angulum interiorem alba.

Polia Stevensii, *Guen. Noct.* ii. 38, 721.

Central Hindostan.

Country unknown.

19. Polia? privata.

Mas. *Cinerea; thorax antice nigro fasciatus; alæ anticæ fuscescente-cinereæ, lineis angulosis albidis et nigris, lunulis marginalibus atris, orbiculari et reniformi albidis nigro marginatis, orbiculari perobliqua; posticæ albæ, venis apice lineaque marginali nigris.*

Male. Cinereous. Palpi porrect, extending somewhat beyond the head. Antennæ minutely ciliated. Thorax with a black band in front. Abdomen crested. Fore wings brownish cinereous; the lines zigzag, whitish and black; marginal lunules deep black; spots whitish, with black borders, orbicular very oblique. Hind wings white; veins towards the tips and marginal line black. Length of the body 7 lines; of the wings 18 lines.

a. ———?

Genus 6. DASYPOLIA.

Corpus robustum, pilosissimum. Proboscis brevis. Palpi validi, pilosissimi, caput superantes; articulus 3us minimus. Antennæ validæ, subciliatæ, corporis dimidio longiores. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus breviusculis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subconvexo sat obliquo.

Luperina, p., *Boisd.*
Spælotis, p., *Dup.*

Crymodes, p., *Guen. Ind.*
Chera, p., *Hübn. Verz. Schmett.* 211.
Polia, p., *Treit.; Steph.; Herr.-Schæff.*
Dasypolia, *Guen. Noct.* ii. 44.

Body stout, very pilose. Proboscis short. Palpi stout, very pilose, extending somewhat beyond the head; third joint very minute. Antennæ stout, minutely ciliated, more than half the length of the body. Abdomen extending for almost one-third of its length beyond the hind wings. Legs stout; hind tibiæ with rather short spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, slightly convex and rather oblique along the exterior border.

1. Dasypolia Templi.

Cinereo-fusca; abdomen subtestaceum; alæ anticæ cano conspersæ, fasciis undulatis subobsoletis, luteo indistincte bivittatæ, maculis canis; posticæ subtestaceæ, lineis duabus cinereis.

Noctua Templi, *Schaldt, Thunb. Ins. Suec. Holm.* (1792), 56. *Dup. Hist. Nat. Lép. Fr.* vi. 43, pl. 75. *Hübn. Eur. Schmett. Noct.* f. 373.
Polia Templi, *Treit. Schmett.* v. 23. *Steph. Ill. Brit. Ent. Haust.* iii. 31, pl. 26, f. 1. *Herr.-Schæff. Schmett. Eur.* ii. 265, 254, pl. 88, f. 454.
Chera Templi, *Hübn. Verz. Schmett.* 211, 2114.
Luperina Templi, *Boisd. Ind. Méth.* 115, 888.
Crymodes Templi, *Guen. Ind.* 238. *Steph. Cat. Brit. Lep.* 99.
Dasypolia Templi, *Guen, Noct.* ii. 44, 728.

a. England. From Mr. Stevens' collection.

New Zealand.

2. Dasypolia? dotata.

Mas. *Saturate rufo-ferruginea; alæ anticæ denticulatæ, nigro-cinereo nebulosæ, lituris costalibus lineisque angulosis nigris, submarginali subundulata nigricante-fusca pallido marginata, lunulis marginalibus nigris, maculis nigro marginatis, orbiculari obliqua, reniformi extus albido marginata; posticæ æneo-fuscæ.*

Male. Deep reddish ferruginous, very pilose. Palpi very pilose; third joint very minute, less than one-fourth of the

length of the second. Antennæ ciliated. Abdomen extending a little beyond the hind wings. Fore wings denticulated along the exterior border, with black marks along the costa; disk and borders of the veins mostly clouded with blackish gray; transverse lines angulose, black; submarginal one slightly undulating, blackish brown, with a pale exterior border; marginal black lunules linear; spots bordered with black; claviform spot almost contiguous to the orbicular, the latter oblique and smaller than the reniform, which has a whitish exterior border. Hind wings æneous-brown. Length of the body 8 lines; of the wings 18 lines.

a. New Zealand. Presented by the Rev. W. Colenso.

Genus 7. EPUNDA.

Corpus robustum, pilosissimum. Proboscis mediocriter longa. Palpi validi, pilosi, ascendentes; articulus 3us conicus, brevis. Antennæ corporis dimidio valde longiores. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ, apud costam rectæ, apice subrotundatæ, margine exteriore subdenticulato, mediocriter obliquo. *Mas.*—Antennæ serratæ. Abdomen alas posticas vix triente superans, apud apicem dense fasciculatum. *Fœm.*—Abdomen alas posticas vix superans.

Brithys, p., *Hübn. Verz. Schmett.*
Polia, p., *Treit.; Boisd.; Dup.; Herr.-Schæff.*
Hadena, p., *Dup.*
Epunda, p., *Dup.; Guen. Noct.* ii. 45.

Body stout, very pilose. Proboscis moderately long. Palpi stout, pilose, ascending; third joint conical, hardly one-fourth of the length of the second. Antennæ much more than half the length of the body. Legs stout; hind tibiæ with four long spurs. Wings moderately broad, slightly rounded at the tips, moderately oblique and slightly denticulated along the exterior border. *Male.*—Antennæ serrated. Abdomen extending for nearly one-third of its length beyond the hind wings, thickly tufted at the tip. *Female.*—Abdomen hardly extending beyond the hind wings.

1. Epunda Luneburgensis.

Cinereo-fusca; abdomen cinereum; alæ anticæ lineis transversis undulatis et macularum marginibus canis nigro marginatis, fascia intermedia nigra; posticæ cinereæ, fœm. *albo ciliatæ.*

Orthosia Luneburgensis, *Herr.-Schæff. Schmett. Eur.* ii. 201, 63, pl. 83, f. 428—430.
Epunda Luneburgensis, *Guen. Noct.* ii. 45, 729.
Hanover.

2. Epunda nigra.

Nigra; thorax linea transversa atra; abdomen cinereum; alæ anticæ lineis transversis undulatis atris, reniformi ex parte testaceo marginata, fascia exteriore obliqua subobsoleta atra; posticæ maris *albæ*, fœminæ *cinereæ*.

——— ———, *Engr. Pap. d'Eur.* 555, a—c.
Noctua nigra, *Haw. Lep. Brit.* 89.
Noctua nigricans? *Hübn. Eur. Schmett. Noct.* f. 538.
Hadena æthiops, *Ochs. Syst. Gloss. Treit. Schmett.* iv. 184; *Suppl.* 28. *Dup. Hist. Nat. Lép. Fr. Suppl.* v. pl. 1, f. 1.
Charæas nigra, *Steph. Ill. Brit. Ent. Haust.* ii. 110, pl. 20, f. 2.
Noctua æthiops, *Geyer, Schmett.* f. 861. *Frey. Beitr.* ii. pl. 147; iii. pl. 221.
Hadena æthiops, *Boisd. Ind. Méth.* 117, 912.
Polia æthiops, *Herr.-Schæff. Eur. Schmett.* ii. 270.
Polia serpentina, *Herr.-Schæff. Schmett.* ii. 275, 290, pl. 15, f. 72, 73.
Epunda nigra, *Guen. Noct.* ii. 47, 731.

a—g. England. From Mr. Stephens' collection.
h, i. Scotland. From Mr. Foxcroft's collection.
j—l. England.

Genus 8. DERTHISA.

Corpus robustum. Proboscis brevis. Palpi validi, porrecti, pilosi; articulus 3us minimus. Antennæ corporis dimidio valde longiores. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subdenticulato sat obliquo. *Mas*—Antennæ late pectinatæ. Abdomen alas posticas sat superans. *Fœm.*—Antennæ subciliatæ. Abdomen alas posticas vix superans.

Epunda, p., *Guen.*
Colocasia, p., et Brithys, p., *Hübn. Verz. Schmett.* 201, 226.

Body stout. Proboscis short. Palpi stout, porrect, pilose; third joint extremely minute, not one-sixth of the length of the second. Antennæ much more than half the length of the body.

Legs stout; hind tibiæ with four long spurs. Wings narrow. Fore wings straight in front, rounded at the tips, rather oblique and very slightly denticulated along the exterior border. *Male.*—Antennæ deeply pectinated. Abdomen extending somewhat beyond the hind wings. *Female.*—Antennæ very minutely ciliated. Abdomen hardly extending beyond the hind wings.

1. Derthisa scoriacea.

Cinerea; tarsi albo-cincti; alæ anticæ fascia lata antice repanda ferruginea lineis submarginalibus maculisque duabus nigris ornata, fascia tenui undulata exteriore fusca, maculaque costali subapicali nigro-fusca, necnon linea transversa basali nigra; posticæ maris *albæ*, fœm. *albidæ.*

——— ———, *Roës. Ins.* iii. pl. 11. *Engr. Pap. d'Eur.* 469, a—c.

Bombyx scoriacea, *Esp. Cont. Bomb.* pl. 83, f. 4, 5. *Treit. Schmett.* iv. 108. *Boisd. Ind. Méth.* 127. 1032; *Icon.* pl. 71.

Noctua scoriacea, *Frey. Beitr.* pl. 141, f. 3.

Epunda scoriacea, *Dup. Hist. Nat. Lép. Fr. Suppl.* vi. 157, pl. 15, f. 3. *Guen. Noct.* ii. 47, 733.

Polia scoriacea, *Herr.-Schæff. Schmett. Eur.* ii. 255, pl. 72, f. 371.

Noctua capreæ, *Hübn. Eur. Schmett. Noct.* f. 19.

Colocasia scoriacea, *Hübn. Verz. Schmett.* 201, 2038.

Bombyx trimacula, *Bork. Eur. Schmett.* iii. 133.

a—f. Europe. From M. Becker's collection.

2. Derthisa lutulenta.

Fusca; abdomen cinereum; alæ anticæ lineis transversis undulatis maculisque subobsoletis; posticæ maris *albæ*, fœminæ *cinereæ, albido ciliatæ.*

Noctua lutulenta, *Wien. Verz.* N. 16. *Dup. Hist. Nat. Lép. Fr.* v. 269, pl. 24, f. 1, 2. *Hübn. Eur. Schmett. Noct.* f. 159.

Noctua melaleuca, *Esp. Schmett.* iv. pl. 64 f. 5.

Noctua electrica? *Fabr. Ent. Syst* iii. 2, 46, 125.

Noctua fusca, *Haw. Lep. Brit.* 68. *Steph. Ill. Brit. Ent. Haust.* ii. 109.

Noctua orthostigma, *Steph. Ill. Brit. Ent. Haust.* ii. 110.

Noctua consimilis, *Steph. Ill. Brit. Ent. Haust.* ii. 110.

Polia Sedi, *Dup. Hist. Nat. Lép. Fr. Suppl.* vi. 196, pl. 18, f. 1.

Hadena lutulenta, *Treit. Schmett.* iv. 187. *Boisd. Ind. Méth.* 117, 911.
Polia lutulenta, *Herr.-Schæff. Eur. Schmett.* ii. 269, 267, pl. 17, f. 83; pl. 79, f. 405. *Guen. Noct.* ii. 46, 730.
Brithys lutulenta, *Hübn. Verz. Schmett.* 226, 2265.

a—i. England. From Mr. Stephens' collection.
j. England.
k—l. Europe. From M. Becker's collection.

3. Derthisa chioleuca.

Purpurascente-fusca; abdomen cinereum; alæ anticæ lineis transversis indistinctis nigris purpureo marginatis, reniformi albo notata; posticæ albæ (mas) *aut subtestaceæ* (fœm.) *macula lineaque cinereis.*

Polia chioleuca, *Herr.-Schæff. Schmett. Eur.* ii. 255, pl. 16, f. 76—78.
Epunda chioleuca, *Guen. Noct.* ii. 47, 732.

South Europe.

4. Derthisa? tephra.

Noctua Tephra, *Hübn. Eur. Schmett. Noct.* f. 797. *Boisd. Ind. Méth.* 127, 1031.
Epunda Tephra, *Guen. Noct.* ii. 48, 736.

Dalmatia.

Genus 9. EUMICHTIS.

Corpus sat robustum. Proboscis mediocriter longa. Palpi porrecti, pilosi, caput non superantes; articulus 3us minimus. Antennæ corporis dimidio valde longiores. Abdomen alas posticas perpaullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo. *Mas.*—Antennæ mediocriter pectinatæ.

Eumichtis, *Hübn. Verz. Schmett.* 211.
Epunda, p., *Guen.*

Body rather stout. Proboscis moderately long. Palpi porrect, pilose, not extending beyond the head; third joint very minute, about one-sixth of the length of the second. Antennæ very

much more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad, straight in front, rounded at the tips, slightly oblique along the exterior border. *Male.*—Antennæ moderately pectinated.

1. Eumichtis lichenea.

Olivacea; abdomen cinerascens, apice cervinum; alæ anticæ lineis transversis undulatis maculaque claviformi albis nigro marginatis, orbiculari testacea nigro signata albo nigroque marginata, reniformi alba testaceo signata nigro ex parte marginata; posticæ albæ, gutta discali lunulisque marginalibus nigricantibus.

Noctua lichenea, *Hübn. Eur. Schmett.* f. 562, 563. *Dup. Hist. Nat. Lép. Fr.* vi. 420, pl. 99.
Polia lichenea, *Treit. Schmett. Suppl.* 54. *Boisd. Ind. Méth.* 127, 1029. *Herr.-Schæff. Eur. Schmett.* ii. 256, 222.
Eumichtis lichenea, *Hübn Verz. Schmett.* 211, 2110.
Epunda lichenea, *Guen. Noct.* ii. 48, 737.
Var. Polia viridicincta, *Treit. Schmett. Suppl.* x. 55. *Boisd. Ind. Méth.* 127, 1030. *Dup. Hist. Nat. Lép. Fr. Suppl.* vi. pl. 262, pl. 24. *Herr.-Schæff. Schmett. Eur.* ii. 256, 223, pl. 81, f. 415.

a, b. England. Presented by J. C. Dale, Esq.
c—i. England. From Mr. Stephens' collection.
j. England. From Mr. Stevens' collection.
k, l. Europe. From M. Becker's collection.

Genus 10. RAPHIA.

Corpus sat gracile. Proboscis mediocriter longa. Palpi pilosi, porrecti, sat graciles; articulus 3us minutus, conicus. Antennæ graciles, corporis dimidio valde longiores. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore sat obliquo.

Raphia, *Hübn. Verz. Schmett.* 212.
Hadena, p., *Herr.-Schæff.*
Cleoceris, *Boisd.*
Bombycia, *Steph.*
Cymatophora, p., *Treit.*
Epunda, p., *Guen.*

Body rather slender. Proboscis moderately long. Palpi pilose, porrect, rather slender; third joint minute, conical, about one-fourth of the length of the second. Antennæ slender, very much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs rather stout; hind tibiæ with four moderately long spurs. Wings narrow. Fore wings straight in front, rounded at the tips, rather oblique along the exterior border.

Europe.

1. Raphia viminalis.

Cinerascens; thorax nigro fasciatus; alæ anticæ ex parte subcervinæ, maculis duabus albidis nigro marginatis, strigis duabus posticis lineola connexis lineaque basali nigris.

———— ————, *Roës. Ins.* pl. 11. *Deg. Ins.* ii. 339, pl. 5.
Noctua viminalis, *Fabr. Ent. Syst.* iii. 2, 72, 206. *Dup. Hist. Nat. Lép. Fr.* vi. 177, pl. 84.
Noctua stricta, *Esp. Schmett.* iv pl. 84, f. 5.
Noctua Saliceti, *Bork. Eur. Schmett.* iv. 266.
Noctua scripta, *Hübn. Eur. Schmett. Noct.* f. 50. *Haw. Lep. Brit.* 143.
Raphia Saliceti, *Hübn. Verz. Schmett.* 212, 2119.
Bombycia viminalis, *Steph. Ill. Brit. Ent. Haust.* iii. 58.
Cymatophora Saliceti, *Treit. Schmett.* iv. 104.
Hadena Saliceti, *Herr.-Schæff. Eur. Schmett.* ii. 282, 314.
Cleoceris viminalis, *Boisd. Ind. Méth.* 93, 703.
Epunda viminalis, *Guen. Noct.* ii. 48, 734.

a—k. England. From Mr. Stephens' collection.
l—p. England.
q—t. Europe. From M. Becker's collection.
v, w. Europe.

North America.

2. Raphia onychina.

R. viminali *simillima; alæ anticæ magis cinereæ, macula orbiculari maxima subquadrata intus nigro marginata, reniformi ex parte rufescente tincta, linea submarginali e maculis tribus quadratis obscurioribus.*

Epunda onychina, *Guen. Noct.* ii. 48, 735.

North America.

3. Raphia propulsa.

Mas et fœm. *Cinerea; palpi breves, ascendentes; antennæ simplices, validæ; thorax linea antica transversa nigra; abdomen pallidum; alæ anticæ lineis nigris duplicatis undulatis incompletis, extus albido tinctæ, linea submarginali alba, strigis submarginalibus nigris, maculis magnis nigro ex parte marginatis, orbiculari subrotunda intus albo marginata, ciliis apud venas albis; posticæ pallide cinereæ, marginibus latis obscurioribus subcupreis.* Mas.—*Abdomen apice fasciculatum.*

Male and female. Cinereous. Palpi short, ascending. Antennæ simple, rather stout. Thorax with a black transverse line in front. Abdomen pale. Fore wings with the transverse line black, double, incomplete, irregularly undulating; submarginal line white, angulose, accompanied by some black streaks; a whitish tinge between it and the exterior median line; orbicular and reniform spots large, partly bordered with black; orbicular nearly round, with an inner white border; ciliæ white opposite the veins. Hind wings pale cinereous, with broad rather darker and slightly cupreous borders. *Male.*—Abdomen tufted at the tip. Length of the body 5 lines; of the wings 12 lines.

a. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

Genus 11. VALERIA.

Corpus valde robustum et pilosum. Proboscis mediocriter longa. Palpi validi, porrecti, pilosi; articulus 3us cylindricus, 2i dimidio non brevior. Antennæ corpore paullo breviores. Abdomen cristatum, alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subconvexo sat obliquo. *Mas.*—Antennæ mediocriter pectinatæ.

Valeria, *Germ.; Steph.; Guen. Ann. Soc. Ent. Fr.* vii. 121; *Noct* ii. 49.
Meganephria, p., *Hübn. Verz. Schmett.* 206.
Miselia, p., *Ochs; Treit.; Boisd.*

Body very stout and pilose. Proboscis moderately long. Palpi stout, porrect, pilose; third joint cylindrical, full half the length of the second. Antennæ full three-fourths of the length of the body. Abdomen crested, extending a little beyond the hind wings. Legs

stout; hind tibiæ with four long spurs. Wings moderately broad, rather long. Fore wings straight in front, rounded at the tips, slightly convex and rather oblique along the exterior border. *Male.*—Antennæ moderately pectinated.

1. Valeria oleagina.

Nigricans; abdominis latera fulvescentia; alæ anticæ viridi variæ, guttis costalibus et marginalibus albis, maculi orbiculari fusca albo marginata, reniformi alba nigro bipunctata; posticæ albæ, fascia margineque cinereis.

——— ———, *Engr. Pap. d'Eur.* 441, a—d.

Phalæna-Bombyx oleagina, *Gmel. ed. Syst. Nat.* i. 5, 2418, 515.

Bombyx oleagina, *Fabr. Mant. Ins.* ii. 117, 92; *Ent. Syst.* iii. 1, 440, 101. *Oliv. Enc. Méth.* v. 63, 136. *Bork. Schmett.* 350, 131. *Donov. Brit. Ins.* xiii. pl. 439.

Noctua oleagina, *Wien. Verz.* 59, 2. *Esp. Schmett.* iv. pl. 60, f. 4. *Hübn. Eur. Schmett. Noct.* pl. 7, f. 33. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 95. f. 6. *Haw. Lep. Brit.* 116. *Frey. Beitr.* ii. pl. 134.

Miselia oleagina, *Treit. Schmett.* v. 401, 7. *Boisd. Ind. Méth.* 124, 981.

Valeria oleagina, *Steph. Ill. Brit. Ent. Haust.* iii. 23. *Herr.-Schæff. Eur. Schmett.* ii. 294, 349. *Guen. Noct.* ii. 50, 738. *Bruand, Ann. Soc. Ent. Fr.* 2me *Sér.* vii. 39.

Noctua (Miselia) oleagina, *Meig. Syst. Besch.* iii. 125, 78, pl. 103, f. 6.

Meganephria oleagina, *Hübn. Verz. Schmett.* 206, 2071.

a—c. England. From Mr. Stephens' collection.
d, e. England.
f. Europe. From M. Becker's collection.

2. Valeria jaspidea.

Fusca; abdomen pallide fuscum, vitta cinerea, fasciis pallidis; alæ anticæ virides, striga postica basali flava, vittâ discali fusca, macularum marginibus lineaque submarginali postice valde angulosa albis, guttis marginalibus nigris, linea marginali flava, ciliis fuscis testaceo strigatis; posticæ albidæ, gutta discali fasciisque duabus fuscis, linea marginali flava.

Noctua jaspidea, *Vill. Ent. Lin.* ii. 284, 383.

Miselia jaspidea, *Donzel, Ann. Soc. Ent. Fr.* x. 211, pl. 4, pt. 1. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 90, pl. 58. *Herr.-Schæff. Schmett. Eur.* ii. 294, 350, pl. 83, f. 426.

Valeria jaspidea, *Guen. Noct.* ii. 51, 739. *Bruand, Ann. Soc. Ent. Fr. 2me Sér.* vii. 39; *Ann. Soc. Linn. Lyon.* 1850—1852, 253.

South France.

3. VALERIA? ORBICULOSA.

Fusco-cinerea; alæ anticæ lineis interioribus angulosis pallide cinereis, exterioribus nigris albido marginatis, reniformi maculaque apicali rufescentibus, lituris costalibus albidis; posticæ albæ, litura margineque latissimo atris.

Noctua orbiculosa, *Esp. Schmett.* iv. 93, pl. 93, f. 8.

Miselia orbiculosa, *Treit. Schmett.* iv. 404. *Boisd. Ind. Méth.* 124, 982.

Valeria orbiculosa, *Herr.-Schæff. Eur. Schmett.* ii. 294, 351, pl. 13, f. 63, 64. *Guen. Noct.* ii. 52, 741.

Hungary.

South America.

4. VALERIA BERYLLUS.

Violaceo-fusca; femora rufescentia, pilosissima; alæ anticæ lineis conspicuis violaceis aut olivaceo-viridibus, linea alba strigaque angulata carnea submarginalibus, margine viridi guttis nigris, orbiculari et reniformi valde approximatis, hac viridi rufoque marginata, illa angulata alba viridi varia; posticæ cupreo-cinereæ, macula lineaque nigris.

Valeria beryllus, *Guen. Noct.* ii. 51.

Brazil.

Genus 12. MISELIA.

Corpus sat robustum. Proboscis mediocriter longa. Palpi porrecti, caput vix superantes; articulus 3us cylindricus, 2i triente non brevior. Antennæ corpore paullo breviores. Abdomen cristatum, perpaullo superans. Pedes sat graciles; tibiæ posticæ calcaribus longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subacutæ, margine exteriore mediocriter obliquo. *Mas.*—Antennæ serratæ aut subciliatæ.

Miselia, *Guen. Ann. Soc. Ent. Fr.* vii. 122; *Noct.* ii. 53.
Meganephria, p., *Hübn. Verz. Schmett.*
Miselia, p., *Treits.*; *Steph.*; *Boisd.*; *Herr.-Schæff.*
Xylophasia, p., *Herr.-Schæff.*

Body moderately stout. Proboscis moderately long. Palpi porrect, extending very little beyond the head; third joint cylindrical, full one-third of the length of the second. Antennæ about three-fourths of the length of the body. Abdomen crested, extending very little beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, slightly acute at the tips, moderately oblique along the exterior border. *Male.*—Antennæ serrated or minutely ciliated.

1. Miselia Oxyacanthæ.

Cinerascens; thorax fusco varius, linea transversa undulata nigra; alæ anticæ vittis viridibus squamosis, lineis transversis undulatis, striga basali, reniformis margine guttisque submarginalibus nigris, fascia marginali canescente strigaque postica alba.

——— ———, *Albin, Ins.* pl. 14, 10. *Roës. Ins.* i. pl. 33. *Wilk. Pap.* 12, pl. 1, c, 1. *Engr. Pap. d'Eur.* 328, a—f.
Phalæna-Noctua Oxyacanthæ, *Linn. Faun. Suec.* 1207. *Gmel. ed. Syst. Nat.* i. 2569, 165.
Noctua Oxyacanthæ, *Wien. Verz.* 70, 3. *Fabr. Sp. Ins.* ii. 232, 114; *Mant. Ins.* ii. 168, 222; *Ent. Syst.* iii. 2, 98, 277. *Esp. Schmett.* iv. pl. 160, f. 1—7. *Bork. Schmett.* iv. 155, 63. *Hübn. Eur. Schmett. Noct.* pl. 71, f. 31. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 96, f. 1. *Sepp. Ins.* iii. pl. 13. *Haw. Lep. Brit.* 115. *Donov. Brit. Ins.* v. pl. 165.
Meganephria Oxyacanthæ, *Hübn. Verz. Schmett.* 206, 2069.
Noctua (Miselia) Oxyacanthæ, *Meig. Handb.* 162, 36; *Syst. Besch.* iii. 126, 79, pl. 102, f. 3.
Miselia Oxyacanthæ, *Treit. Schmett.* v. 405, 9. *Steph. Ill. Brit. Ent. Haust.* iii. 24. *Herr.-Schæff. Eur. Schmett.* ii. 295, 352. *Boisd. Ind. Méth.* 124, 983. *Guen. Noct.* ii. 54, 742.

a—c. England. Presented by H. Doubleday, Esq.
d—u. England. From Mr. Stephens' collection.
w. England. From Mr. Foxcroft's collection.
x, y. England.
z—bb. Europe. From M. Becker's collection.

2. MISELIA BIMACULOSA.

Albicans, fusco confertim conspersa; abdomen sordide albidum; alæ anticæ maculis tribus oblongis albis fusco marginatis, lineolis nonnullis lanceolatis nigris, vittis duabus abbreviatis fuscis; posticæ subcineræ, maculis duabus nigricantibus, una discali altera postica.

——— ———, *Engr. Pap. d'Eur.* 327, a, b.
Phalæna-Noctua bimaculosa, *Gmel. ed. Syst. Nat.* i. 5, 2544, 184.
Noctua bimaculosa, *Wien. Verz.* 70, 2. *Fabr. Mant. Ins.* ii. 157, 152; *Ent. Syst.* iii. 2, 70, 197. *Esp. Schmett.* iv. pl. 157, f. 5; pl. 194, f. 3, 4. *Bork. Eur. Schmett.* iv. 144, 57. *Hübn. Eur. Schmett. Noct.* pl. 7, f. 32. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 96, f. 2.
Miselia bimaculosa, *Treit. Schmett.* v. 408, 10. *Curt. Brit. Ent.* pl. 177. *Steph. Ill. Brit. Ent. Haust.* iii. 24. *Boisd. Ind. Méth.* 124, 984. *Guen. Noct.* ii. 55, 743.
Xylophasia bimaculosa, *Herr.-Schæff. Eur. Schmett.* ii. 289, 336.
Noctua (Miselia) bimaculosa, *Meig. Syst. Besch.* iii. 128, 82, pl. 103, f. 5.
Meganephria bimaculosa, *Hübn. Verz. Schmett.* 206, 2070.

a. England.
b—d. Europe. From M. Becker's collection.

Genus 13. LAMPROSTICTA.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, caput paullo superantes; articulus 3us lanceolatus, 2i triente non longior. Antennæ corporis dimidio valde longiores. Abdomen cristatum, alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore vix convexo mediocriter obliquo. *Mas.*—Antennæ subserratæ.

Chariptera, *Guen. Ann. Soc. Ent. Fr.* vii. 124; *Noct.* ii. 55.
Lamprosticta, *Hübn. Verz. Schmett.* 206.
Miselia, p., *Ochs.; Treits.*
Polia, p., *Boisd.*

Body stout. Proboscis moderately long. Palpi porrect, extending a little beyond the head; third joint lanceolate, about one-third of the length of the second. Antennæ very much more than

half the length of the body. Abdomen crested, extending a little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, very slightly convex and moderately oblique along the exterior border. *Male.*—Antennæ minutely serrated.

1. Lamprosticta culta.

Alba, nigro varia; abdomen fasciculis dorsalibus albo-nigris; alæ fuscæ, maculis nonnullis nigris, lineis transversis undulatis ocellisque tribus nigro-albis; posticæ albæ margaritaceæ, macula apud angulum interiorem (mas) *aut marginibus* (fœm.) *nigricantibus.*

——— ———, *Engr. Pap. d'Eur.* 327, a—c. *Schæff. Icon.* i. pl. 66.

Phalæna-Noctua culta, *Gmel. ed. Syst. Nat.* i. 5, 2570, 1154.

Noctua culta, *Wien. Verz.* 70, 4. *Fabr. Mant. Ins.* ii. 165, 224; *Ent. Syst.* iii. 2, 94, 279. *Esp. Schmett.* iv. pl. 120, f. 4. *Bork. Eur. Schmett.* iv. 145, 58. *Hübn. Eur. Schmett. Noct.* pl. 7, f. 34. *Dup. Hist. Nat. Lép. Fr.* v. pl. 95, f. 4. *Frey. Beitr.* i. pl. 93.

Phalæna viridana, *Naturf.* 1779, pl. 3, f. 5.

Lamprosticta culta, *Hübn. Verz. Schmett.* 207, 2072.

Noctua (Miselia) culta, *Meig. Syst. Besch.* iii. 125, 77, pl. 102, f. 5.

Miselia culta, *Treit. Schmett.* v. 395, 5. *Boisd. Ind. Méth.* 124, 985.

Chariptera culta, *Guen. Noct.* ii. 56, 744. *Herr.-Schæff. Eur. Schmett.* ii. 294, 348.

a—c. Europe. From M. Becker's collection.

2. Lamprosticta gemmea.

Viridi-fuscescens; thorax fasciis anticis vittisque duabus lateralibus arcuatis fuscescentibus; alæ anticæ ocellis duobus discalibus, maculis posticis guttisque costalibus albis nigro marginatis, lineis transversis angulosis nigris; posticæ cinerascentes, fasciis duabus angustis margineque fuscescentibus.

Miselia gemmea, *Treit. Schmett.* v. 393; *Suppl.* 52. *Boisd. Ind. Méth.* 124, 986. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 269, pl. 24, f. 1.

Dianthæcia gemmea, *Herr.-Schæff. Schmett. Eur.* ii. 251, 203; ii. pl. 15, f. 470.
Chariptera gemmea, *Guen. Noct.* ii. 58, 746.

Germany. Switzerland. Lapland.

a. Europe. From M. Becker's collection.

North America.

3. Lamprosticta festa.

Æneo-fusca; caput parvum, albo nigroque varium, thoracis cristæ rufescente marginatæ; alæ anticæ area media magna alba lineis undulatis atris subparallelis fasciata, maculis atro marginatis, orbiculari parva rotunda, reniformi fusco inquinata nigro divisa, lunulis marginalibus albis nigro marginatis, ciliis albis nigrisque; posticæ nigricantes, ciliis interrupte albis.

Chariptera festa, *Guen. Noct.* ii. 57, 745.

Carolina.

Genus 14. AGRIOPIS.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, caput sat superantes; articulus 3us cylindricus, 2i dimidio fere longior. Antennæ corporis dimidio multo longiores. Abdomen latum, alas posticas sat superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, mediocriter latæ, apud costam rectæ, apice rotundatæ, margine exteriore subconvexo sat obliquo. *Mas.*—Antennæ vix serratæ.

Moma, p, *Hübn. Verz. Schmett.* 203.
Miselia, p., *Treit.; Steph.*

Agriopis, *Boisd. Ind. Méth.* 123. *Guen. Noct.* ii. 58.

Body stout. Proboscis moderately long. Palpi porrect, extending somewhat beyond the head; third joint cylindrical, full half the length of the second. Antennæ much more than half the length of the body. Abdomen broad, extending somewhat beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad, rather long, straight in front, rounded at the tips, slightly convex and rather oblique along the exterior border. *Male.*—Antennæ very minutely serrated.

1. Agriopis aprilina.

Glauco-viridis; thorax nigro varius; abdomen cinereum; tarsi nigro cincti; alæ anticæ fasciis undulatis et macularum marginibus incompletis nigris albo marginatis, costa alba nigro notata, guttis marginalibus lanceolatis nigris; posticæ nigro-cinereæ fasciis duabus albidis.

———, *Roës. Ins.* iii. pl. 39, f. 4. *Rai, Ins.* 158, 4. *Sulz. Ins.* pl. 22, f. 8. *Deg. Ins.* i. pl. 5, f. 22, 23. *Sepp. Ins.* ii. pl. 2921. *Engr. Pap. d'Eur.* 326, a—k.

Phalæna-Noctua aprilina, *Linn. Faun. Suec.* 1178. *Gmel. ed. Syst. Nat.* i. 5, 2561, 138.

Noctua aprilina, *Fabr. Sp. Ins.* ii. 234, 125; *Mant. Ins.* ii. 172, 246; *Ent. Syst.* iii. 2, 102, 305. *Esp. Schmett.* iv. pl. 118, f. 1—3. *Bork. Eur. Schmett.* iv. 141, 56. *Hübn. Eur. Schmett. Noct.* pl. 15, f. 71. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 95, f. 5. *Haw. Lep. Brit.* 112. *Donov. Brit. Ins.* pl. 354, f. 1.

Moma aprilina, *Hübn. Verz. Schmett.* 203, 2050.

Miselia aprilina, *Treit. Schmett.* v. 411, 11. *Steph. Ill. Brit. Ent. Haust.* iii. 25.

Noctua (Miselia) aprilina, *Meig. Handb.* 162, 3, pl. 12, f. 9; *Syst. Besch.* iii. 127, 81, pl. 102, f. 4.

Noctua runica, *Wien. Verz.* 70, 1.

Agriopis aprilina, *Boisd. Ind. Méth.* 123, 980. *Herr.-Schæff. Eur. Schmett* ii. 293, 347. *Guen. Noct.* ii. 59, 747.

a—c. England. Presented by H. Doubleday, Esq.
d—q. England. From Mr. Stephens' collection.
r—t. England.
v, u. Europe. From M. Becker's collection.

Genus 15. JASPIDEA.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, pilosi; articulus 3us cylindricus, brevis. Antennæ simplices, corporis dimidio valde longiores. Thorax bicristatus. Abdomen cristatum, alas posticas triente superans. Pedes validi, tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rectangulatæ, margine exteriore denticulato vix obliquo.

Plusia, p., *Ochs.*
Diacope, *Hübn. Verz. Schmett.* 204.

Abrostola, p., *Treit.*
Jaspidea, *Boisd. Ind. Méth.* 128; *Guen. Noct.* i. 59.

Body stout. Frontal tuft conspicuous. Proboscis moderately long. Palpi porrect, pilose; third joint cylindrical, about one-fourth of the length of the second. Antennæ simple, very much more than half the length of the body. Thorax with a double crest. Abdomen crested, extending nearly one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings moderately broad. Fore wings straight in front, rectangular at the tips, denticulated and hardly oblique along the exterior border.

1. Jaspidea celsia.

Pomacea aut viridi-flava; palpi, cristæ thoracisque fasciæ duæ biarcuatæ fusca; abdomen subtestaceum; alæ anticæ macula basali guttam albam includente, fascia media subramosa, gutta exteriore fasciaque marginali subinterrupta fuscis; posticæ cinereo-fuscæ, ciliis albis.

———, *Engr. Pap. d'Eur.* 262, bis, a—d.
Phalæna-Bombyx celsia, *Linn. Faun. Suec.* 1141, pl. 2. *Gmel. ed. Syst. Nat.* i. 5, 2437, 77.
Bombyx celsia, *Fabr. Mant. Ins.* ii. 117, 96; *Ent. Syst.* iii. 1, 441, 105. *Oliv. Enc. Meth.* v. 64, 139. *Esp. Schmett.* iii. pl. 69, f. 2, 3. *Bork. Eur. Schmett.* iii. 431, 161.
Noctua celsia, *Hübn. Eur. Schmett. Noct.* pl. 15, f. 72. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 103, f. 6.
Diacope celsia, *Hübn. Verz. Schmett.* 204, 2053.
Plusia celsia, *Treit. Schmett.* v. 147, 5. *Eversm. Faun. Volg-Ural.* 315.
Noctua (Miselia) celsia, *Meig. Handb.* 180, 85; *Syst. Besch.* iii. 129, 85, pl. 103, f. 8, a, b.
Jaspidea celsia, *Boisd. Ind. Méth.* 128, 1035. *Guen. Noct.* ii. 60, 748.

Sweden. Austria. Styria. South Russia.

a. Europe. From M. Becker's collection.
b. Europe. From Mr. Milne's collection.
c. Hungary.

Genus 16. CHARIDEA.

Corpus robustum. Proboscis longa. Palpi breves, subascendentes; articulus 2us apice pilis squamosis munitus; 3us breviusculus, pyriformis. Antennæ articulis brevissime ciliatis. Thorax latus, squamosus, antice villosus. Abdomen *maris* longum, *fem.* breviusculum cylindrico-conicum. Pedes breviusculi; tibiarum posticarum calcares breves. Alæ anticæ subdentatæ, apice subacuminatæ.

Charidea, *Guen. Noct.* ii. 60.

Body robust. Proboscis long. Palpi short, slightly ascending; second joint villose-squamose, its tip with a little fringe of squamose hairs; third short, pyriform. Joints of the antennæ furnished with little tufts of hairs, which are very short in the male, and still more short in the female. Thorax broad, squamose, villose in front. Abdomen long in the male, short and cylindric-conical in the female. Legs rather short; hind tibiæ with slender spines. Fore wings subdentate, slightly acute at the tips, with distinct marks; the two median lines forming a V.

1. Charidea elegantissima.

Thorax carneo-cinereus, fusco fasciatus; abdomen maculis flavescentibus; alæ anticæ carneo-roseæ, ferrugineo nebulosæ, maculis basalibus duabus magnis duabusque parvis anterioribus, macula mediana angulata, orbiculari et reniformi viridescentibus albo-roseo lineatis, linea submarginali interrupta flavo-alba, intus lineolis antice nigris postice viridibus marginata; posticæ ochraceo-albæ, margine nigricante.

Charidea elegantissima, *Guen. Noct.* ii. 749, 61.

Cape.

2. Charidea V. brunneum.

Mas et fœm. *Roseo-cinerea; thorax lineis duabus lateralibus fuscis; alæ anticæ aurato fusco tinctæ, plaga media subtrigona aurato fusca orbicularem et reniformem includente lineis medianis pallidis fusco marginatis inclusa, maculis pallido lineatis postice confluentibus macula parva trigona saturate fusca pallido lineata divisis, linea submarginali e punctis fuscis; posticæ pallido cinereæ, margine subfuscescente, ciliis linea flava divisis.*

Charidea V. brunneum, *Guen. Noct.* ii. 62, 750.
Pondicherry.

Genus 17. PHLOGOPHORA.

Corpus robustum. Proboscis mediocriter longa. Palpi robusti, oblique ascendentes; articulus 3us minimus. Antennæ corporis dimidio longiores. Thorax (*P. meticulosæ*) antice subcristatus, postice bicristatus. Abdomen alas posticas superans. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, sat angustæ aut mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore plus minusve denticulato et obliquo. *Mas.*—Antennæ vix serratæ.

Phlogophora, p., *Ochs.; Treit.; Boisd.; Steph.; Guen. Ann. Soc. Ent. Fr.* vii. 220; *Noct.* ii. 62.
Phlogophora et Solenoptera, *Dup.; Herr.-Schæff.*
Trigonophora, p., *Hübn. Verz. Schmett.* 217.

Body stout. Proboscis moderately long. Palpi very stout, obliquely ascending; third joint extremely minute. Antennæ more than half the length of the body. Thorax (in *P. meticulosa*) with a small crest in front and a larger double crest behind. Abdomen extending somewhat beyond the hind wings. Legs rather long and slender; hind tibiæ with four long spurs. Wings rather long and narrow or moderately broad. Fore wings straight in front, somewhat rounded at the tips, more or less denticulated and moderately or very oblique along the exterior border. *Male.*—Antennæ very minutely serrated.

Europe.

1. Phlogophora scita.

Albida; capitis vertex et thorax pallide virides; alæ anticæ ex parte pallide virides, fascia lata antice furcata et interrupta saturate maculaque postica interiore viridibus, gutta subapicali nigra; posticæ fascia subobsoleta viridescente.

Noctua scita, *Hübn. Eur. Schmett. Noct.* pl. 14, f. 68; pl. 101, f. 475. *Dup. Hist. Nat. Lép. Fr.* vi. 337, pl. 94, f. 1, 2. *Frey. Beitr.* ii. pl. 105.

Phlogophora scita, *Treit. Schmett.* v. 371, 2. *Boisd. Ind. Méth.* 965. *Guen. Noct.* ii. 63, 751.

Noctua (Phlogophora) scita, *Meig. Syst. Besch.* iii. 119, 65, pl. 100, f. 9.
Trigonophora scita, *Hübn. Verz. Schmett.* 217, 2162.
Solenoptera scita, *Herr.-Schæff. Eur. Schmett.* ii. 300, 365.

2. PHLOGOPHORA METICULOSA.

Testacea; thorax lineis transversis undulatis fasciculisque cervinis; alæ anticæ lituris costalibus nigricantibus, plaga postica interiore fasciaque antice furcata et maculam reniformem includente cervinis, linea exteriore angulata fasciaque diffusa subcervinis, macula discali ciliisque ex parte nigro conspersis; posticæ fasciis duabus fuscescentibus.

———, *Göed. Ins.* i. pl. 56. *List. Göed.* f. 44. *Albin, Ins.* pl. 13. *Réaum. Ins.* i. pl. 8, f. 25, 26; pl. 14, f. 12, 13. *Merian, Ins. Eur.* pl. 24. *Roës. Ins.* iv. pl. 9. *Geoff. Ins. Par.* ii. 151, 84. *Deg. Ins.* i. pl. 5, f. 14; ii. 1, 427, 1. *Wilk. Pap.* iii. pl. 1, a, 3. *Engr. Pap. d'Eur.* 487, a—c, e, f. *Sepp. Ins.* pl. 21, f. 7.
Phalæna-Noctua meticulosa, *Linn. Faun. Suec.* 1164. *Scop. Ent. Carn.* 512. *Gmel. ed. Syst. Nat.* i. 5, 2557, 132.
Noctua meticulosa, *Wien. Verz.* 83, 1. *Fabr. Sp. Ins.* ii. 228, 160; *Mant. Ins.* ii. 163, 192; *Ent. Syst.* iii. 2, 83, 242. *Esp. Schmett.* iv. pl. 112, f. 5—7. *Bork. Eur. Schmett.* iv. 369, 159. *Hübn. Eur. Schmett. Noct.* pl. 14, f. 67. *Dup. Hist. Nat. Lép. Fr.* vi. 340, pl. 94, f. 3. *Donov. Brit. Ins.* iii. pl. 159. *Haw. Lep. Brit.* 251.
Noctua (Phlogophora) meticulosa, *Meig. Handb.* 161, 34; *Syst. Besch.* iii. 118, 64, pl. 100, f. 8.
Phlogophora meticulosa, *Treit. Schmett.* v. 373, 3. *Steph. Ill. Brit. Ent. Haust.* iii. 83. *Curt. Brit. Ent.* pl. 619. *Boisd. Ind. Méth.* 121, 966. *Guen. Noct.* ii. 64, 754.
Trigonophora meticulosa, *Hübn. Verz. Schmett.* 217, 2161.
Solenoptera meticulosa, *Herr.-Schæff. Eur. Schmett.* ii. 300, 364.

a—c. England. Presented by E. Doubleday, Esq.
d—n. England. From Mr. Stephens' collection.
o, p. England.
q—s. Europe. From M. Becker's collection.
t—u. Europe.

3. Phlogophora empyrea.

Ferruginea; thorax nigro varius; abdomen canescens, fasciculis lateralibus pallide rufescentibus; alæ anticæ purpurascentes, plagis lineolisque transversis nigricantibus, litura discali sigmaformi albido sericea; posticæ canescentes, lunula discali margineque latissimo cinereis, ciliis pallidis.

———, *Engr. Pap. d'Eur.* 426, a, b.

Noctua empyrea, *Hübn. Eur Schmett. Noct.* pl. 13, f. 63; pl. 141, f. 646. *Dup. Hist. Nat. Lép. Fr.* v. 345, pl. 94, f. 4.

Trigonophora empyrea, *Hübn. Verz. Schmett.* 217, 2165.

Bombyx flammea, *Esp. Schmett.* iii. pl. 53.

Noctua flammea, *Bork. Eur. Schmett.* iv. 460, 183.

Phlogophora empyrea, *Treit. Schmett.* v. 381, 6. *Boisd. Ind. Méth.* 121, 964. *Guen. Noct.* ii. 66, 756. *Herr.-Schæff. Eur. Schmett.* ii. 277, 293.

Noctua (Phlogophora) empyrea, *Meig. Syst. Besch.* iii. 120, 68, pl. 100, f. 7.

England. France. Italy.

a—d. Europe. From M. Becker's collection.

4. Phlogophora iodea.

Ferruginea; thorax plagis duabus lateralibus fuscis; abdomen cervino-cinerascens; alæ anticæ plagis fuscis nigro marginatis, orbiculari et reniformi cervinis pallido nigroque marginatis, linea submarginali undulata pallida, lunulis marginalibus nigris angustis; posticæ pallide cinerascentes, linea margineque fuscescentibus, ciliis cervinis.

Phlogophora iodea, *Guen. Ess.* 220; *Ind.* 245; *Noct.* ii. 66, 756. *Herr.-Schæff. Schmett. Eur.* ii. 277, pl. 89, f. 457.

France. Italy.

a, b Europe. From M. Becker's collection.

North America.

5. Phlogophora anodonta.

Cervina; abdomen testaceum; alæ anticæ linea basali, gutta plaga maxima trigona discali, reniformi lineaque submarginali nigro-fuscis, guttis costalibus subapicalibus albis; posticæ testaceo-cinerascentes, fasciis duabus fuscescentibus.

Phlogophora anodonta, *Guen. Noct.* ii. 63, 752.

a. New York. Presented by E. Doubleday, Esq.

6. Phlogophora Iris.

Testacea; thorax lineis transversis ferrugineis; alæ anticæ angustæ, fascia latissima viridi-ferruginea fusco testaceo albidoque lineata, orbiculari et reniformi fuscescentibus albido marginatis, striga lata exteriore testacea, lineis exterioribus et submarginalibus ferrugineis fuscis albidisque, guttis costalibus subapicalibus albis; posticæ testaceæ, linea fascia exteriore margineque ferrugineis, ciliis albidis.

Phlogophora Iris, *Guen. Noct.* ii. 64, 753.

a, b. New York. Presented by E. Doubleday, Esq.

c. Orilla, West Canada. From Mr. Bush's collection.

7. Phlogophora periculosa

Cervina; alæ anticæ linea basali, gutta, plaga maxima trigona, orbiculari et reniformi ex parte strigaque apicali nigricantibus aut ferrugineis, margine exteriore cinereo-fuscescente, guttis costalibus subapicalibus albidis; posticæ linea margineque fuscescentibus.

Phlogophora periculosa, *Guen. Noct.* ii. 655, 755.

a—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.

e. Newfoundland. Presented by W. C. St. John, Esq.

Genus 18. EUPLEXIA.

Corpus robustum, pilosum. Proboscis mediocriter longa. Palpi validi, pilosi, oblique ascendentes; articulus 3us longi-conicus, minutus. Antennæ corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore denticulato, mediocriter obliquo. *Mas.*—Antennæ vix ciliatæ.

Phlogophora, p., *Treit.; Dup.; Boisd.*
Euplexia, *Steph.; Guen. Noct.* ii. 67.

Body stout, pilose. Proboscis moderately long. Palpi stout, pilose, obliquely ascending; third joint elongate-conical, about one-fourth of the length of the second. Antennæ rather more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, denticulated and moderately oblique along the exterior border. *Male.*—Antennæ very minutely ciliated.

Europe.

1. Euplexia lucipara.

Rubro-ferruginea; abdomen fuscescens; alæ anticæ fasciis variis incompletis atris, macula reniformi alba, fascia exteriore cervina; posticæ fuscæ, basi albidæ, lineis duabus angulosis nigro-fuscis albido ex parte marginatis.

——— ———, *Engr. Pap. d'Eur.* 491, a—d. *Sepp, Ins.* iv. pl. 19.

Phalæna-Noctua lucipara, *Linn. Faun. Suec.* 1201; *Syst. Nat.* 857, 187. *Gmel. ed. Syst. Nat.* i. 5, 2576, 187.

Noctua lucipara, *Wien. Verz.* 84, 3. *Fabr. Sp. Ins.* ii. 233, 121; *Mant. Ins.* ii. 170, 235; *Ent. Syst.* iii. 2, 294. *Esp. Schm.* iv. pl. 154, f. 1—4. *Bork. Eur. Schmett.* iv. 373, 153. *Haw. Lep. Brit.* 138. *Donov. Brit. Ins.* vi. pl. 230. *Hübn. Eur. Schmett. Noct.* pl. 11, f. 55. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 94, f. 5. *Knock, Beit.* ii. pl. 1, f. 4—7. *Frey. Beit.* i. pl. 82.

Phlogophora lucipara, *Treits, Schmett.* v. 377, 4. *Boisd. Ind. Méth.* 121, 963. *Herr.-Schæff. Eur. Schmett.* ii. 277, 295.

Trigonophora lucipara, *Hübn. Verz. Schmett.* 217, 2164.

Noctua (Phlogophora) lucipara, *Meig. Handb.* 161, 35; *Syst. Besch.* iii. 119, 66, pl. 101, f. 1.

Euplexia lucipara, *Steph. Ill. Brit. Ent. Haust.* iii. 1. *Guen. Noct.* ii. 68, 758.

a—i. England. From Mr. Stephens' collection.
j, l. England. From Mr. Stevens' collection.
m—p. England.
q. Scotland. From Mr. Foxcroft's collection.
r, s. Europe. From M. Becker's collection.
t, v. Germany.
u—aa. Trenton Falls, New York. Presented by E. Doubleday, Esq.

Australia.

2. Euplexia emergens.

Mas. *Ferrugineo-fusca; abdomen obscure cinereum, cristis nigricantibus; alæ anticæ area media margineque exteriore obscurioribus, lineis nigris undulatis, linea submarginali ferruginea, strigis marginalibus atris, maculis nigro marginatis, reniformi testacea; posticæ subcupreæ, basi ciliisque cinereis subæqualibus.*

Male. Ferruginous-brown. Abdomen dark cinereous, with blackish crests. Fore wings with black undulating lines, blackish between the median lines and along the exterior border, between which and the ferruginous submarginal line there are deep black streaks; orbicular and reniform spots with black borders and of nearly equal size and shape, the latter mostly testaceous. Hind wings somewhat cupreous; base and ciliæ cinereous. Length of the body 6 lines; of the wings 14 lines.

a. Tasmania. Presented by the Rev. Augustus Beaufort.

3. Euplexia confundens.

Mas et fœm. *Ferruginea; thorax nigro conspersus; abdomen cinereum, cristis ferrugineis; alæ anticæ lineis transversis nigricantibus indeterminatis, pallido marginatis, lituris costalibus lunulisque marginalibus nigris, disco margineque exteriore nigricante suffusis, orbiculari et reniformi subæqualibus ex parte nigro marginatis, striga obliqua subapicali pallide ferruginea; posticæ subcupreæ, basi cinereæ, ciliis pallide ferrugineis.* Mas. — *Reniformis ex parte albu.* Fœm.— *Reniformis ex parte testacea.*

Male and female. Ferruginous. Thorax sprinkled with black. Abdomen cinereous; crests ferruginous. Fore wings with the transverse lines blackish, indistinct and irregular, and with pale borders; costal marks and marginal lunules black; a blackish tinge in the disk and along the exterior border; orbicular and reniform spots partly bordered with black, nearly equal in size and shape; a pale ferruginous oblique subapical streak. Hind wings somewhat cupreous, cinereous at the base; ciliæ pale ferruginous. *Male.*— Reniform spot partly white. Abdomen bordered with ferruginous hairs. *Female.*—Reniform spot partly testaceous. Length of the body 6 lines; of the wings 14 lines.

a. Tasmania. Presented by R. Butler, Esq.
Tasmania. Presented by E. Doubleday, Esq.

4. Euplexia exclusa.

Ferruginea; palpi oblique ascendentes, articulo 3o longiusculo; abdomen cinereum, cristis ferrugineis; alæ anticæ apud medium obscuriores, lineis undulatis testaceis nigrisque, maculis testaceo marginatis, orbiculari obliqua, reniformi apud medium flava, striga antica apud lineam submarginalem testacea, margine exteriore nigro-cinereo strigis atris, guttis costalibus subapicalibus albidis; posticæ cupreo-fuscæ.

Ferruginous. Palpi obliquely ascending; third joint lanceolate, one-third of the length of the second. Abdomen cinereous, with ferruginous crests. Fore wings with undulating testaceous and black lines, the latter very indistinct; middle part dark ferruginous; discal spots with testaceous borders; orbicular oblique; reniform with a yellow disk; a testaceous streak along the fore part of the inner side of the submarginal line; space beyond the submarginal blackish cinereous, with deep black streaks; some whitish costal subapical dots. Hind wings cupreous-brown. Length of the body 6—6½ lines; of the wings 14—15 lines.

a—c. Tasmania. Presented by R. Butler, Esq.

5. Euplexia indocilis.

Nigricans, E. exclusæ *structura; abdomen cinereum, cristis nigricantibus; alæ anticæ lineis undulatis atris, exterioribus quoque necnon striga lata submarginali testaceis, guttis costalibus subapicalibus albidis; posticæ cupreo-fuscæ, aut albidæ cupreo-fusco late marginatæ.*

Blackish, like *E. exclusa* in structure. Abdomen cinereous, with blackish crests. Fore wings with a testaceous mark on the reniform spot, undulating lines and borders of the spots deep black; exterior lines also testaceous; a broad transverse testaceous streak near the exterior border; some whitish costal subapical dots. Hind wings whitish, with broad cupreous-brown borders, or nearly wholly cupreous-brown. Length of the body 6—7 lines; of the wings 14—16 lines.

a. Tasmania. Presented by E. Doubleday, Esq.
b. Swan River. Presented by Sir J. Richardson.

Genus 19. HETEROCHROMA.

Corpus sat validum. Proboscis mediocriter longa. Palpi longi, ascendentes, frontem superantes; articulus 2us subinflatus; 3us gracilis, linearis, 2i triente non brevior. Antennæ robustæ, cylindricæ, corporis dimidio multo longiores, ciliis nullis. Thorax villoso squamosus, subhirsutus, bicristatus. Abdomen cristatum, alas posticas plus triente superans. Pedes breves, validi; tibiæ posticæ calcaribus robustis. Alæ latiusculæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore vix obliquo.

Heterochroma, *Guen. Noct.* ii. 69.

Body moderately stout. Proboscis moderately long. Palpi long, ascending, extending above the front; second joint slightly tumid; third slender, linear, full one-third of the length of the second. Antennæ robust, cylindrical, without any ciliæ, much more than half the length of the body. Thorax villose-squamose, somewhat hirsute, with two crests. Abdomen crested, extending for more than one-third of its length beyond the hind wings. Legs short, robust; hind tibiæ with stout spurs. Wings rather broad. Fore wings straight in front, somewhat rounded at the tips, hardly oblique along the exterior border.

South America.

1. Heterochroma eriopioides.

Mas et fœm. *Nigro-fusca; palporum articulus 3us 2o vix brevior; abdomen longissimum; alæ anticæ violaceo-cinereo fuscoque variæ, apice rotundatæ, margine exteriore recto denticulato, dente apicali acuta, fascia fere basali pallida puncto squamoso candido postice terminata, macula magna media postice saturate rufa, claviformi lituraque altera nigris, orbiculari et reniformi indistinctis subæqualibus, litura magna obliqua maculaque apicalibus ochraceis; posticæ nigricantes, basi ochraceæ.*

Heterochroma eriopioides, *Guen. Noct.* ii. 69, 759; iii. pl. 8, f. 8.

Brazil.

2. HETEROCHROMA ? ACHATIOIDES.

Mas. *Rosea; palporum articulus 2us arcuatus, 3us rectus filiformis; alæ anticæ ochraceo variæ, lineis duabus medianis sinuatis interruptis nigris apud costam dilatatis, linea submarginali obsoleta, orbiculari et reniformi contiguis nigris roseo variis, punctis marginalibus nigricantibus, ciliis flavescente-roseis; posticæ subnigræ ciliis flavo-roseis, subtus pallide flavescentes.*

Heterochroma achatioides, *Guen. Noct.* ii. 70, 761.

Brazil.

Country unknown.

3. HETEROCHROMA HADENOIDES.

Fœm. *Rubro-fusca; thorax crassus, convexus, valde squamosus; abdomen breviusculum, tricristatum, subtus subroseum lineis lateralibus fuscis; alæ anticæ dentatæ, squamosæ, violaceo subtinctæ, lineis maculisque obsoletis, umbra mediana obscuriore velutina, margine exteriore obscuriore ex parte cinereo, strigis lanceolatis punctisque marginalibus, litura squamosa basali postica viridescente; posticæ fuscæ, ciliis flavescentibus fusco inquinatis.*

Heterochroma Hadenoides, *Guen. Noct.* ii. 70, 760.

Genus 20. POLYPHLÆNIS.

Corpus sat validum. Proboscis breviuscula. Palpi validi, pilosi, oblique ascendentes; articulus 3us cylindricus, 2i triente non brevior. Antennæ graciles, simplices, corporis dimidiò multo longiores. Thorax et abdomen subcristata, hoc abdomen paullo superans. Pedes mediocriter validi; tibiæ posticæ calcaribus longis. Alæ latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subdenticulato vix obliquo.

Thalpophila, p., *Hübn. Verz. Schmett.* 208.
Polia, p., *Ochs.*
Mithymna, p., *Treit.*
Polyphlenis, *Boisd. Ind. Méth.* 128; *Dup.*; *Guen. Noct.* ii. 71.

Body moderately stout. Proboscis rather short. Palpi stout, pilose, obliquely ascending; third joint cylindrical, full one-third of

the length of the second. Antennæ slender, simple, much more than half the length of the body. Thorax and abdomen slightly crested, the latter extending a little beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings broad. Fore wings straight in front, rounded at the tips, slightly denticulated, and very slightly convex and oblique along the exterior border.

Europe.

1. Polyphlænis sericina.

Viridis; thorax nigro varius; abdomen cinereum; alæ anticæ lineis transversis undulatis incompletis strigisque duabus posticis submarginalibus nigris, maculis ex parte minimæ nigro marginatis, fascia exteriore angulosa albida nigro marginata; posticæ luteæ, macula discali margineque lato nigricantibus, ciliis pallidis.

Var. *Viridi-cinerea; abdomen cinereum, vitta dorsali nigra; alæ anticæ nebulosæ, lineis transversis angulatis albis nigro marginatis.*

——— ———, *Engr. Pap. d'Eur.* 431, a—c.

Noctua sericina, *Lang. Verz.* 973. *Esp. Schmett.* iv. 183, pl. 108, f. 4. *Bork. Eur. Schmett.* iv. 119, 47.

Noctua viridis, *De Vill. Ins.* iii.

Noctua linogrisea, *Hübn. Eur. Schmett. Noct.* pl. 4, X.

Polia prospicua, *Treit. Schmett.* v. 59, 19.

Noctua prospicua, *Dup. Hist. Nat. Lép. Fr.* vi. pl. 97, f. 4.

Noctua (Miselia) prospicua, *Meig. Syst. Besch.* iii. 128, 83, pl. 102, f. 9.

Noctua prospicua, *Bork. Eur. Schmett.* iv. 122, 49. *Hübn. Eur. Schmett. Noct.* pl. 23, f. 108. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 97, f. 4.

Polyphlænis nebulifera, *Guen. Ind.* 245.

Polyphlænis sericina, *Boisd. Ind. Méth.* 128, 1033. *Guen. Noct.* ii. 71, 762.

Thalpophila prospicua, *Hübn. Verz. Schmett.* ii. 208, 2079.

a, b. Europe. From M. Becker's collection.

2. POLYPHLÆNIS? ALLIACEA.

P. prospicua *fere duplo major; alæ anticæ latiores, virides, albido adspersæ, macula reniformi nivea magna nigro-cincta; posticæ fulvæ, nigro marginatæ; quatuor subtus cinereæ, posticæ apud angulum interiorem fulvescentes.*

Polia alliacea, *Germ. Faun.* *Herr.-Schæff. Schmett. Eur.* ii. 257.
Polyphlenis xanthochloris, *Boisd. Ind. Méth.* 128, 1034. *Guen. Ind.* 245. *Herr.-Schæff. Schmett. Eur.* ii. pl. 16, f. 74, 75.
Polyphlænis alliacea, *Guen. Noct.* ii. 73, 763.

Sicily.

North America.

3. POLYPHLÆNIS HERBACEA.

Mas et fœm. *Læte viridis; alæ anticæ lituris nigris, lineis medianis undulatis duplicatis, linea submarginali fere obsoleta, spatio medio nigricante, orbiculari et reniformi nigro marginatis; posticæ rufo-fuscæ, subæneæ.*

Polyphlænis herbacea, *Guen. Noct.* iii. 73, 764.

North America.

Genus 21. EUROIS.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, porrecti, pilosi; articulus 3us minimus. Antennæ corporis dimidio paullo longiores. Thorax subcristatus. Abdomen cristatum, alas posticas paullo aut triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subobliquo aut sat obliquo. *Mas.* — Antennæ subciliatæ, aut vix ciliatæ.

Aplecta, *Guen. Ann. Soc. Ent. Fr.* vii. 217; *Noct.* ii. 74.
Polia, p., et Phlogophora, p., *Ochs.*
Polia, p., *Treit.; Boisd.; Steph.; Curt.*
Eurois, *Hübn. Verz. Schmett.* 217.

Body stout. Proboscis moderately long. Palpi stout, porrect, pilose; third joint very minute, not more than one-sixth of the length of the second. Antennæ a little more than half the length of the body. Thorax slightly crested. Abdomen distinctly crested,

extending a little or full one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad, rather long. Fore wings straight in front, rounded at the tips, denticulated and moderately or slightly oblique along the exterior border. *Male.*—Antennæ more or less minutely ciliated.

A. Alæ anticæ viridescentes. - - herbida, *Wien. Verz.*
B. Alæ anticæ non viridescentes.
A. Alæ anticæ cinerascentes aut fuscescentes.
A. Alæ anticæ maculis conspicuis. - - occulta, *Linn.*
B. Alæ anticæ maculis vix conspicuis. - advena, *Wien. Verz.*
B. Alæ anticæ albidæ. - - - - nebulosa, *Hufn.*
C. Alæ anticæ ferrugineo aut ochraceo variæ.
A. Alæ anticæ ferrugineo variæ. - - tincta, *Brahm.*
B. Alæ anticæ ochraceo variæ.
a. Minor, obscurior. - - - Schœnnberri, *Boisd.*
b. Major, pallidior. - - - - speciosa, *Hübn.*

1. Eurois herbida.

Fusco-viridis; caput et thorax nigro alboque varia; abdomen et alæ posticæ cinereo-fuscescentia; alæ anticæ nigro conspersæ, annulis duabus lineisque transversis undulatis albis nigro marginatis.

——— ———, *Engr. Pap. d'Eur.* 465, a, b.
Noctua herbida, *Wien. Verz.* O, 10, 11. *Hübn. Eur. Schmett. Noct.* f. 76, 505. *Dup. Hist. Nat. Lép. Fr.* vi. 395, pl. 97. *Frey. Alt. Beit.* pl. 40, f. 131; *Ent. Zeit. Stett.* ii. 95.
Noctua egregia, *Esp. Schmett.* pl. 119, f. 7; 188. *View.* 116. *Lang.* 918.
Noctua prasina, *Wien. Verz.* O, 11. *Bork. Eur. Schmett.* iv. 175. *Fabr. Ent. Syst.* iii. 2, 281.
Noctua jaspidea, *Bork. Eur. Schmett.* 176.
Noctua mixta, *Haw. Lep. Brit.* 74.
Polia herbida, *Treit. Schmett.* ii. 56. *Curtis, Brit. Ent.* pl. 248. *Steph. Ill. Brit. Ent. Haust.* iii. 30, pl. 27. *Herr.-Schæff. Schmett. Eur.* ii. 263, 247.
Aplecta herbida, *Guen. Ind.* 245; *Noct.* ii. 75, 765. *Boisd. Ind. Méth.* 123, 979.
Eurois herbida, *Hübn. Verz. Schmett.* 218, 2175.

Europe. North America.

a, *b*. England. Presented by Mr. Muff.
c—*q*. England. From Mr. Stephens' collection.
r, *s*. England.
t—*w*. Europe. From M. Becker's collection.
x. Europe.
y—*bb*. Trenton Falls, New York. Presented by E. Doubleday, Esq.
cc. Orilla, West Canada. From Mr. Bush's collection.

2. EUROIS OCCULTA.

Cinereo-fusca, albo conspersa; abdomen murinum; alæ anticæ plaga discali nigro-fusca, maculis conspicuis, extus albidæ fusco conspersæ strigis lanceolatis nigris; posticæ murinæ, albo ciliatæ.

——— ———, *Engr. Pap. d'Eur.* 336, a—c.
Phalæna-Noctua occulta, *Linn. Faun. Suec.* 318, 1203. *Clerck.* pl. 1, f. 6. *Rossi, Mant.* 400.
Noctua occulta, *Hübn. Eur. Schmett. Noct.* pl. 17, f. 79. *Haw. Lep. Brit.* 71. *Dup. Hist. Nat. Lép. Fr.* vi. 386, pl. 97. *Freyer, Alt. Beit.* pl. 10, 30; *Ent. Zeit. Stett.* ii. 94.
Noctua trimaculosa, *Esp. Schmett.* iv. pl. 131, f. 5.
Noctua (Hadena) occulta, *Meig. Syst. Besch.* iii. 107, 46, pl. 100, f. 3.
Eurois occulta, *Hübn. Verz. Schmett.* 218, 2180.
Polia occulta, *Treit. Schmett.* v. 52, 17. *Steph. Ill. Brit. Ent. Haust.* iii. 29. *Curt. Brit. Ent.* pl. 248. *Herr.-Schæff. Eur. Schmett.* ii. 263, 246.
Aplecta occulta, *Guen. Ind.* 245; *Noct.* ii. 76, 766. *Boisd. Ind. Méth.* 123, 977.

a—*e*. England. From Mr. Stephens' collection.
f. England.
g—*i*. Scotland. From Mr. Foxcroft's collection.
j. Scotland. From Mr. Stevens' collection.
k—*p*. Europe. From M. Becker's collection.
q. Orilla, West Canada. From Mr. Bush's collection.

Var. Fœm. *Cinerea; alæ anticæ lineis transversis nigro-cinereis undulatis indistinctis ex parte albido marginatis, linea submarginali angulosa, lunulis marginalibus nigris, maculis nigricante submarginatis, orbiculari albida; posticæ fusco-cinereæ, ciliis albis.*

Noctua occulta, *Fabr. Mant. Ins.* ii. 166, 212; *Ent. Syst.* iii. 2, 88, 263. *Bork. Eur. Schmett.* iv. 541, 218.
Phalæna-Noctua occulta, *Gmel. ed. Syst. Nat.* i. 5, 2564, 147.
Noctua trimaculosa, *Esp. Schmett.* iv. pl. 131, f. 5.
Noctua hepatica, *Hübn. Eur. Schmett. Noct.* pl. 16, f. 77.
Noctua argentina, *Haw. Lep. Brit.* 72.
Eurois tincta, *Hübn. Verz. Schmett.* 218, 2178.
Noctua (Hadena) tincta, *Meig. Syst. Besch.* iii. 107, 45, pl. 100, f. 4.
Polia tincta, *Steph. Ill. Brit. Ent. Haust.* iii. 29. *Herr.-Schæff. Eur. Schmett.* ii. 264, 249.
Aplecta tincta, *Guen. Ind.* 245; *Noct.* ii. 80, 775. *Boisd. Ind. Méth.* 123, 975.

a—j. England. From Mr. Stephens' collection.
k, *l*. England.
m. Scotland. From Mr. Foxcroft's collection.
n—p. Europe. From M. Becker's collection.
q—s. Germany.

7. Eurois advena.

Cinereo-fuscescens; alæ anticæ fasciis undulatis maculisque pallidioribus et obscurioribus viæ conspicuis, linea submarginali fusco notata; posticæ pallidiores, ciliis albidis.

———— ————, *Engr. Pap. d'Eur.* 468, a—c.
Noctua advena? *Wien. Verz.* 77, 11. *Fabr. Mant. Ins.* ii. 183, 304; *Ent. Syst.* iii. 2, 375. *Esp. Schmett.* iv. pl. 178, f. 4, 5. *Bork. Eur. Schmett.* iv. 258. *Hübn. Eur. Schmett. Noct.* f. 81. *Haw. Lep. Brit.* 76. *Dup. Hist. Nat. Lép. Fr.* vi. 392, pl. 96.
Phalæna-Noctua advena, *Gmel. ed. Syst. Nat.* i. 5, 2567, I, 142.
Noctua nitens, *Haw. Lep. Brit.* 77.
Polia nitens, *Steph. Ill. Brit. Ent. Haust.* iii. 28.
Eurois advena, *Hübn. Verz. Schmett.* 218, 2179.
Euplecta advena, *Guen. Ind.* 245; *Noct.* ii. 81, 776; *Boisd. Ind. Méth.* 122, 974.
Polia advena, *Steph. Ill. Brit. Ent. Haust.* iii. 28. *Herr.-Schæff. Eur. Schmett.* ii. 264, 250.

a—h. England. From Mr. Stephens' collection.
i—l. England.
m—p. Europe. From M. Becker's collection.

North America.

8. Eurois implicata.

Alæ anticæ nigricantes, strigis duabus albidis dentatis, maculis ordinariis nigro circumcinctis, orbiculari albida, reniformi cinerea; posticæ fuliginosæ, fimbria alba.

Hadena implicata, *Lefebvre, Ann. Soc. Ent. Fr.* v. 394, pl. 10, f. 4. *Zett. Ins. Lapp.* 940, 16.

Aplecta implicata, *Guen. Ind.* 245; *Noct.* ii. 76, 767. *Boisd. Ind. Méth.* 9, 78. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 592, pl. 49.

Greenland.

9. Eurois imbrifera.

Cinerea; thorax nigro conspersus; alæ anticæ latiusculæ, vix elongatæ, nigro conspersæ, fasciis incompletis fuscescentibus, lineis transversis duplicatis undulatis albidis nigro marginatis, maculis albidis ex parte nigro marginatis, linea submarginali undulata, lunulis marginalibus nigris; posticæ fusco-cinereæ, linea margineque pallidioribus.

Aplecta imbrifera, *Guen. Noct.* ii. 76, 768.

a—c. New York. Presented by E. Doubleday, Esq.
d. Orilla, West Canada. From Mr. Bush's collection.

10. Eurois nimbosa.

Albo-cinerea; thorax fascia antica undulata vittisque duabus lateralibus nigris; alæ anticæ apud costam obscuriores, lineis undulatis aut angulosis albidis incompletis nigro marginatis, orbiculari et reniformi magnis nigro marginatis, lunulis marginalibus nigris; posticæ cinereæ, fascia diffusa albida, ciliis albis.

Aplecta nimbosa, *Guen. Noct.* ii. 77, 769.

a—f. Trenton Falls, New York. Presented by E. Doubleday, Esq.

11. Eurois latex.

Pallide cinerea; alæ anticæ lineis fuscis incompletis indistinctis, macula costali fere basali fusca, orbiculari et reniformi magnis contiguis ex parte nigro marginatis, illa albida, strigis exterioribus lunulisque marginalibus nigris; posticæ cinereæ, ciliis pallidis.

Aplecta latex, *Guen. Noct.* ii. 78, 771.

a. New York. Presented by E. Doubleday, Esq.

12. Eurois condita.

Cinerea; abdomen pallidum; alæ anticæ latiusculæ, non elongatæ, nigro conspersæ, orbiculari et reniformi magnis remotis maculaque basali albidis, lineis albidis angulosis nigro marginatis, fascia exteriore fuscescente, lunulis marginalibus nigris; posticæ cinerascentes, lineis duabus discalibus obscurioribus.

Aplecta condita, *Guen. Noct.* ii. 78, 772.

a. New York. Presented by E. Doubleday, Esq.

South America.

13. Eurois? Tullia.

Viridescens; abdomen cinereum; alæ anticæ lineis fuscis albido marginatis, striga lata discali cinerea, orbiculari et reniformi nigro marginatis, macula costali subapicali nigra; posticæ rufescentes, margine latissimo obscuriore.

Phalæna-Noctua Tullia, *Cram. Pap. Exot.* iv. 242, pl. 400, f. E.
Eurois Tullia, *Hübn. Verz. Schmett.* 218, 2176.

Surinam.

Africa.

14. Eurois postventa.

Fœm. *Cinerea; thoracis discus rubidus, alæ anticæ strigis basilibus, fasciis duabus guttularibus subapicalibus, maculis duabus discalibus liturisque costalibus nigris, plaga discali rubiginosa; posticæ canescentes, macula discali guttisque submarginalibus nigris.*

Eurois postventa (Noctua genuina, Achatia communis), *Geyer, Zeit. Samml. Exot. Schmett.* 18, 433, f. 865, 866.

South Africa.

Asia.

15. Eurois expressa.

Mas. *Cinereo-olivacea; palpi articulo 3o cylindrico longiusculo; antennæ subpectinatæ; thorax nigro conspersus; alæ anticæ lineis transversis angulosis nigricantibus et pallidis, macula orbiculari subrotunda, reniformi apud medium arctata, ciliis albis cinereo notatis; posticæ albo-cinereæ, lineis duabus maculaque discali obscurioribus.*

Polia expressa, *Lederer, Verhandl. Zool. Botan. Verien. in Wien.* v. 109, pl. 1, f. 8.

Altai, Siberia.

16. Eurois? auriplena.

Fœm. *Fusca, flavo varia; abdomen fuscescente-cinereum; alæ anticæ lineis transversis nigricantibus undulatis subinterruptis, signatura apud maculas fasciaque exteriore diffusis canis nitentibus, orbiculari parva rotunda, macula postica alba; posticæ sordide albidæ, margine latissimo fusco.*

Female. Brown. Head and thorax partly yellow. Third joint of the palpi very minute. Antennæ tawny. Abdomen brownish cinereous, extending a little beyond the hind wings. Fore wings yellow about the base and on the borders of the discal spots, and on the submarginal line and the adjoining parts of the veins; transverse lines blackish, undulating, slightly interrupted; a mark about the spots, and an exterior band diffuse, shining, hoary; a white spot behind the orbicular and reniform spots, of which the former is round and hardly half the size of the latter. Hind wings dingy whitish, with very broad brown borders. Length of the body 9 lines; of the wings 22 lines.

a. Ceylon. Presented by R. Templeton, Esq.

17. EUROIS? CRASSIPENNIS.

Sordide testacea; caput pallide luteum; thorax antice cervinus; tarsi nigro fasciati; alæ anticæ ferrugineo-fuscæ, validæ, fasciis angulosis testaceis fusco marginatis, apud marginem exteriorem omnino testaceæ, lunulis marginalibus nigris, maculis discalibus subobsoletis; posticæ cinereæ, lunulis marginalibus nigris, ciliis pallide testaceis.

Dingy testaceous. Head and palpi pale luteous, the latter longer than in the European species of this genus. Thorax fawn-colour in front. Tarsi with black bands. Fore wings ferruginous-brown, stout, with zigzag testaceous dark brown-bordered bands, wholly testaceous towards the exterior border; marginal lunules black; discal spots very indistinct. Hind wings cinereous, with black marginal lunules and pale testaceous ciliæ. Length of the body 8 lines; of the wings 20 lines.

a. Silhet. From the Rev. J. Stainforth's collection.

Genus 22. HADENA.

Corpus robustum, hirsutum. Proboscis mediocriter longa. Palpi validi, pilosi, ascendentes; articulus 3us cylindricus, 2i triente paullo brevior. Abdomen alas posticas vix aut triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ aut vix convexæ, apice subacutæ aut subrotundatæ, margine exteriore subdenticulato mediocriter obliquo. *Mas.*—Antennæ vix ciliatæ.

Hadena, *Guen. Ann. Soc. Ent. Fr.* vii. 213; *Noct.* ii. 81.
Hadena et Mamestra, *Treit.; Boisd.*
Astrapetis, p., Dichonia, p., Æthria, p., Diataraxia, p., Trachea, Mamestra, p. et Lithomoia, p., *Hübn. Verz. Schmett.*
Hadena et Hyppa, *Duponch.*
Polia, p., et Hyppa, *Herr.-Schæff.*

Body stout, somewhat hirsute. Proboscis moderately long. Palpi stout, pilose, ascending, third joint cylindrical, rather less than one-third of the length of the second. Antennæ more than half the length of the body. Abdomen extending hardly or nearly one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight or

hardly convex in front, slightly acute or somewhat rounded at the tips; slightly denticulated and moderately oblique along the exterior border. *Male.*—Antennæ very minutely ciliated.

Europe.

Group 1.

Statura magna. Antennæ laminis distinctis, moniliformes aut dentatæ tantum usque ad apicem. Alæ anticæ macula nulla bidentata.

Species of large size. Antennæ furnished with distinct laminæ, moniliform, or only dentate to the tips. Fore wings without a bidentate mark.

1. Hadena amica.

Cinereo-ferruginea; alæ anticæ purpureo-ferrugineæ, lineis duabus transversis angulatis albidis plagas duas nigras maculasque albido marginatas includentibus, fascia marginali glaucescente fusca atro guttata; posticæ fuscescentes.

Hadena amica, *Treit. Schmett.* v. 332. *Eversm. Faun. Volg-Ural.* 224. *Guen. Ind.* 244: *Noct.* ii. 83, 778. *Boisd. Ind. Meth.* 119, 941. *Dup. Hist. Nat. Lép. Fr. Suppl.* 224, pl. 21. *Herr.-Schæff. Schmett. Eur.* ii. pl. 12, f. 56.

Noctua amica, *Frey. Beit.* iii. 279, f. 4.

North Europe.

2. Hadena stigmatica.

Fusca; alæ anticæ strigis lanceolatis guttisque marginalibus nigris, linea submarginali pallida, orbiculari valde obliqua, reniformi albo signata; posticæ cinereæ, basi fasciaque pallidioribus.

Hadena stigmatica, *Friv. Guen. Noct.* ii. 83, 779.

Hadena leuconota, *Herr.-Schæff. Eur. Schmett.* ii. 279, 300, pl. 76, f. 389.

Isle of Crete.

3. Hadena Satura.

Saturate fusca; thorax fasciis biarcuatis nigris; abdomen cinereum; alæ anticæ fasciis repandis nigro-cinereis, ocellis duabus discalibus, maculis duabus posticis strigisque plurimis lanceolatis nigricantibus; posticæ cinereæ, litura discali margineque obscurioribus.

Noctua Satura, *Wien. Verz.* P, 2. *Hübn. Eur. Schmett.* f. 75. *Dup. Hist. Nat. Lép. Fr.* vi. 319, pl. 92. *Freyer, Neue Beit.* iii. pl. 244, f. 71; *Ent. Zeit. Stett.* ii. 94.

Noctua porphyrea, *Esp. Schmett.* iv. pl. 145, f. 5. *Bork. Eur. Schmett.* iv. 188.

Hadena Satura, *Treit. Schmett.* v. 333. *Dup. Suppl.* iii. 236, pl. 22. *Guen. Ind.* 245; *Noct.* ii. 84, 780. *Eversm. Faun. Volg-Ural.* 225. *Boisd. Ind. Méth.* 120, 944. *Herr.-Schæff. Eur. Schmett.* ii. 279, 299.

Astrapetis Satura, *Hübn. Verz. Schmett.* 219, 2192.

a, b. Europe. From M. Becker's collection.

4. Hadena assimilis.

Alæ anticæ fusco-cupreæ, strigis ordinariis stigmatibusque cupreis; posticæ fuscæ.

Hadena assimilis, *H. Doubleday, Zoologist*, v. 1914. *Guen. Noct.* ii. 85, 781.

a. Scotland. From Mr. Stephens' collection.

5. Hadena adusta.

Obscure fusca; abdomen fusco-cinereum; alæ anticæ fuscæ, nigro-fusco variæ, annulis duobus lineisque tribus transversis cinereis nigro marginatis, linea 1a 2aque undulatis, 3a denticulata marginali; posticæ subcinereæ, linea transversa angulata margineque obscurioribus.

——— ———, *Engr. Pap. d'Eur.* 457, a, b, d.

Noctua adusta, *Esp. Schmett.* iv. pl. 149, f. 1, 2. *Dup. Hist. Nat. Lép. Fr.* vi. 316, pl. 91.

Noctua aquilina, *Bork. Eur. Schmett.* iv. 381, 156.

Noctua valida, *Hübn. Eur. Schmett. Noct.* f. 606—608.

Noctua duplex, *Haw. Lep. Brit.* 83.

Noctua porphyrea, *Scriba*, 145, pl. X, f. 4.
Astrapetis valida, *Hübn. Verz. Schmett.* 219, 2191.
Noctua (Mamestria) adusta, *Meig. Syst. Besch.* iii. 141, 108, pl. 104, f. 10.
Hadena adusta, *Treit. Schmett.* v. 339; *Suppl.* 46. *Dup. Suppl.* iii. 238, pl. 22. *Boisd. Ind. Méth.* 120, 945. *Herr.-Schæff. Eur. Schmett.* ii. 280, 305. *Guen. Noct.* ii. 85, 782.
Var. Hadena satura, *Steph. Ill. Brit. Ent. Haust.* ii. 181.
Var. Noctua Vulturina, *Frey. Beit.* i. pl. 63, f. 1.
Hadena Vulturina, *Herr.-Schæff. Schmett. Eur.* ii. f. 403.
Var.? Noctua Accipetrina, *Esp. Schmett.* iv.

a—i. England. From Mr. Stephens' collection.
j, k. England.
l, m. Scotland. From Mr. Foxcroft's collection.
n, o. Europe. From M. Becker's collection.

6. Hadena Chardinyi.

Fusco-cinerea; alæ anticæ maculis lineisque distinctis nigris albo marginatis, guttis marginalibus albis; posticæ albidæ, macula linea margineque fuscis.

Hadena Chardinyi, *Dup. Hist. Nat. Lép. Fr. Suppl* pl. 21, f. 4.
Hadena pavida, *Herr.-Schæff. Schmett. Eur.* ii. 280, 306, pl. 97, f. 497.

Russia.

7. Hadena Solieri.

Fusca, cinereo varia; thorax fascia undulata nigra; abdomen pallide cinereum; alæ anticæ margine exteriore cinereo, annulis duobus discalibus, venis ex parte strigisque marginalibus nigris, lineis nonnullis repandis albidis; posticæ pallide cinereæ, linea margineque obscurioribus.

Hadena Solieri, *Boisd. Ind. Méth.* 120, 946. *Guen. Noct.* ii. 86, 783. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 233, pl. 22, f. 3. *Herr.-Schæff. Eur. Schmett.* ii. 279, 301, pl. 31, f. 152.

South France. Italy.

a, b. Europe. From M. Becker's collection.

Group 2.

Statura sæpissime parva. Antennæ tantum pubescentes. Alæ anticæ lineis maculisque bene determinatis, macula bidentata rarissime conspicua.

Size very generally small. Antennæ merely pubescent. Fore wings with the lines and the spots quite distinct; the bidentate mark only appearing accidentally.

8. Hadena fovea.

Ferruginea; abdomen fusco-cinereum; alæ anticæ lineis transversis undulatis fasciaque interrupta exteriore atris ex parte testaceo marginatis, fascia interrupta testacea maculam reniformem albidam includente; posticæ fusco-cinereæ.

Phlogophora fovea, *Treit. Schmett.* v. 380, 5; vi. 395. *Herr.-Schæff. Eur. Schmett.* ii. 277, 296.

Noctua fovea, *Dup. Hist. Nat. Lép. Fr.* vii. pl. 103, f. 4, 5. *Geyer, Schmett.* f. 733—736. *Frey. Beit.* pl. 46.

Noctua (Phlogophora) fovea, *Meig. Syst. Besch.* iii. 119, 67, pl. 101, f. 10.

Hadena fovea, *Guen. Ind.* 244; *Noct.* ii. 86, 784. *Boisd. Ind Méth.* 121, 962.

Hungary.

9. Hadena occlusa.

Nigro-fusca; caput cervinum, fascia nigra; thorax anticus cervinus, lineis duabus transversis biarcuatis obscurioribus; abdomen cinerascens; alæ anticæ lineis transversis undulatis duplicatis nigris, apud margines fuscæ, guttis costalibus testaceis, macula discali transversa fulva; posticæ cinereæ, antice pallidiores.

Noctua furva, *Esp. Schmett.* iv. pl. 158, f. 1, 2.

Noctua occlusa, *Hübn. Eur. Schmett. Noct.* f. 732.

Noctua didymoides, *Dup. Hist. Nat. Lép. Fr.* vii. 106, pl. 107, f. 3.

Hadena occlusa, *Treit. Schmett. Suppl.* x. 65. *Guen. Ind.* 244; *Noct.* ii. 87, 785. *Boisd. Ind. Méth.* 121, 961.

Polia occlusa, *Herr.-Schæff. Schmett. Eur.* ii. 275, 289, pl. 13, f. 62.

France.

a—e. Europe. From M. Becker's collection.

10. Hadena roboris.

Var. Cerris. *Cinerea; thorax linea antica transversa interrupta biarcuata; abdomen testaceum; alæ anticæ fascia obliqua subobsoleta obscuriore, lituris costalibus, lunulis marginalibus strigisque transversis variis discalibus nigris, macula discali fusca; posticæ cinerascentes, subfasciatæ, basi pallidiores, linea marginali fusca.*

Noctua roboris, *Hübn. Eur. Schmett. Noct.* f. 847. *Frey. Beit.* iii. pl. 392, f. 2.

Hadena Roboris, *Guen. Ind.* 244; *Noct.* ii. 88, 787. *Boisd. Ind. Méth.* 121, 960. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 159, pl. 15. *Herr.-Schæff. Eur. Schmett.* ii. 282, 313, pl. 11, f. 52.

Var. Hadena Cerris, *Boisd. Ind. Méth.* 121, 960. *Herr.-Schæff. Schmett. Eur.* ii. 282, pl. 31, f. 153.

a—c. Europe. From M. Becker's collection.

11. Hadena monochroma.

Nigro-cinerea; abdomen cinereum; alæ anticæ guttis basalibus et costalibus nigris; alæ anticæ fasciis tribus discalibus postice abbreviatis et connexis unaque submarginali fusco-cinereis nigro et ex parte albido marginatis; posticæ canescentes, litura discali margineque lato fuscescentibus.

——— ———, *Engr. Pap. d'Eur.* 353, a, b.

Noctua monochroma, *Esp. Schmett.* iv. pl. 155, f. 3—6.

Noctua distans, *Hübn. Eur. Schmett. Noct.* f. 522, 523. *Dup. Hist. Nat. Lép. Fr.* vi. 262, pl. 89. *Frey. Beit.* ii. pl. 124.

Dichonia distans, *Hübn. Verz. Schmett.* 217, 2171.

Hadena distans, *Treit. Schmett.* v. 359; *Suppl.* 49. *Guen. Ind.* 244. *Boisd. Ind. Méth.* 120, 957. *Herr.-Schæff. Eur. Schmett.* ii. 281, 311.

Hadena suleeris, *Boisd. Ind.* 72. *Dup. Suppl.* iv. 263, pl. 117, f. 1, 2.

Hadena monochroma, *Guen. Noct.* ii. 88, 788.

a, b. Europe. From M. Becker's collection.

12. Hadena Saportæ.

Cinereo-fusca; thorax linea transversa nigra; abdomen cinereum; alæ anticæ nigricante subnebulosæ, lineis transversis undulatis strigisque marginalibus lanceolatis nigris, illis testaceo marginatis, striga obliqua testacea orbicularem includente, reniformi testaceo notata; posticæ albidæ, macula, linea margineque fuscis.

——— ———, *Engr. Pap. d'Eur.* 475, a—c.

Noctua Saportæ, *Esp. Schmett.* iv. 451, pl. 142, f. 2 (tenebrosa), *Dup. Hist. Nat. Lép. Fr.* vi. 410, pl. 98. *Geyer, Schmett.* f. 836, 837.

Hadena Saportæ, *Guen. Ind.* 244; *Noct.* ii. 88, 789. *Boisd. Ind. Méth.* 121, 958. *Herr.-Schæff. Eur. Schmett.* ii. 281, 307, pl. 11, f. 53.

Noctua Ilicis (erratim), *Frey. Beit.* iii. pl. 292.

a, b. Europe. From M. Becker's collection.
c—e. Europe.

13. Hadena Protea.

Viridi-cinerea; thorax linea transversa antica biarcuata vittisque nigris; abdomen canescens; alæ anticæ ocellis duobus discalibus, lineis transversis undulatis, angulis exterioribus guttisque costalibus nigris; posticæ canescentes, lunula margineque fusco-cinereis interlineatis.

——— ———, *Engr. Pap. d'Eur.* 292, a—c, e.

Noctua Protea, *Wien. Verz.* 84, 7. *Esp. Schmett.* iv. pl. 150, f. 6. *Scriba, Ins.* 199, pl. 13 (Thalassina erratim). *Brahm*, 292. *Bork. Eur. Schmett.* iv. 386, 158. *Hübn. Eur. Schmett. Noct.* pl. 87, f. 406. *Dup. Hist. Nat. Lép. Fr.* vi. 259, pl. 89, f. 2.

Noctua Seladonia? *Fabr. Ent. Syst.* iii. 2, 103, 308. *Haw. Lep. Brit.* 111.

Dichonia Protea, *Hübn. Verz. Schmett.* 217, 2173.

Hadena Protea, *Treit. Schmett.* v. 362, 22. *Guen. Ind.* 244. *Noct.* ii. 89, 790. *Boisd. Ind. Méth.* 121, 959. *Herr.-Schæff. Eur. Schmett.* ii. 281, 310.

Hadena Seladonia, *Steph. Ill. Brit. Ent. Haust.* iii. 23.

Noctua (Mamestra) Protea, *Meig. Syst. Besch.* iii. 144, 112, pl. 104, f. 3.

a—q. England. From Mr. Stephens' collection.
r, y. England.
z. Scotland. From Mr. Foxcroft's collection.
aa—dd. Europe. From M. Becker's collection.

14. Hadena convergens.

Cinereo-fusca; thorax albo nigroque fasciatus; abdomen cinerascens; alæ anticæ vitta interrupta, lituris costalibus striga basali lineisque undulatis incompletis venisque nigris, striga apud angulum interiorem cervina; posticæ pallide cinereæ, macula discali margineque obscurioribus.

Noctua convergens, *Wien. Verz.* 84, 8. *Fabr. Ent. Syst.* iii. 2, 100, 297 (leucomelas erratim). *Bork. Eur. Schmett.* iv. 148. *Hübn. Eur. Schmett. Noct.* f. 84. *Dup. Hist. Nat. Lép. Fr.* vi. 298, pl. 91.
Noctua spicula, *Esp. Schmett.* iv. pl. 66, f. 2.
Dichonia convergens, *Hübn. Verz. Schmett.* 217, 2172.
Hadena convergens, *Treit. Schmett.* v. 357. *Guen. Ind.* 244; *Noct.* ii. 90, 794. *Boisd. Ind. Méth.* 120, 956. *Herr.-Schæff. Eur. Schmett.* ii. 282, 312.

France. Austria.

a. Europe. From M. Becker's collection.

15. Hadena proxima.

Glaucescens; abdomen cinerascens; alæ anticæ lineis transversis nigris, fascia lata maculaque costali subapicali fuscescentibus macularum marginibus lineaque submarginali albis nigrisque; posticæ cinerascentes, litura discali margineque fuscescentibus.

Noctua proxima, *Hübn. Eur. Schmett. Noct.* f. 409, 810. *Dup. Hist. Nat. Lép. Fr.* vi. 264, pl. 89. *Frey. Beitr.* ii. pl. 104.
Hadena proxima, *Treit. Schmett.* v. 324; *Suppl.* 44. *Guen. Ind.* 244; *Noct.* ii. 91, 796. *Boisd. Ind. Méth.* 119, 929.
Polia proxima, *Herr.-Schæff. Eur. Schmett.* ii. 258, 229.
Dichonia proxima, *Hübn. Verz. Schmett.* 217, 2170.

Switzerland. Styria.

16. Hadena nigricula.

Fuliginoso-nigricans, subnebulosa, maculis lineisque ordinariis nigris, obsoletis; antennæ setaceæ.

Hadena nigricula, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xx. 3, 79, 15.

Ural Mountains, Orenburg Province, Lower Volga Region.

17. Hadena cana.

Cinerea; alæ anticæ et maculæ nigro ex parte marginatæ; posticæ basi pallidiores.

Var. *Albida; alæ anticæ cinereæ, ochraceo notatæ, lineis transversis nigris, costa, macularum marginibus et triente marginali albidis, linea basali maculaque inter orbicularem et reniformem nigris.* Fœm.—*Alæ anticæ albidæ, fascia obscuriore.*

Hadena cana, *Eversm. Bull. Mosc.* 1841, pl. 6, 7; *Faun. Volg-Ural.* 230. *Guen. Noct.* ii. 91, 797.
Polia cana, *Herr.-Schæff. Eur. Schmett.* ii. 258, 230, pl. 17, f. 82.
Polia ochrostigma, *Herr.-Schæff. Eur. Schmett.* ii. 258, 231, pl. 33, f. 165, 166; pl. 92, f. 475.

South Russia.

a, b. Europe. From M. Becker's collection.

18. Hadena Meissonieri.

Cinerascens; antennæ moniliformes, pubescentes; thorax robustus, linea antica transversa nigra; alæ anticæ linea submarginali fere obsoleta, maculis discalibus concoloribus, disco obscuris, orbiculari pyriformi non obliqua, reniformi latiore magis rotundata, claviformi brevi; posticæ albæ, venis margineque angusto nigricantibus.

Hadena Meissonieri, *Guen. Noct.* ii. 92, 798.

Marseilles.

19. Hadena alpigena.

Testaceo-cinerea; palpi graciles, caput superantes; abdomen testaceum, subcristatum; alæ anticæ albido variæ, apud medium saturatiores, lineis transversis et macularum marginibus nigris, orbiculari ovata obliqua, reniformi subexcavata, claviformi subacuta incumbente; posticæ flavescente-albæ, venis lineaque marginali fuscis.

Hadena alpigena, *Boisd. Icon. Lép.* pl. 84; *Ind. Méth.* 120, 953. *Guen. Ind.* 244; *Noct.* ii. 93, 799.

Alps of South-East France.

Group 3.

Statura sæpissime mediocris. Alæ anticæ litura bidentata optime determinata.

Species of middling size. Fore wings with the bidentate mark more conspicuous than in the other groups.

20. Hadena glauca.

Canescens, pilis nonnullis nigris; thorax fascia antica nigra; abdomen cinereum; alæ anticæ nigro nebulosæ aut maculatæ, lineis undulatis nigris cano marginatis, linea angulosa alba strigisque nigris exterioribus, maculis tribus albidis aut albido variis bene determinatis; posticæ fusco-cinereæ, ciliis albis.

Noctua glauca, *Kléem. Ins.* i. pl. 48, f. 1—7. *Hübn. Eur. Schmett. Noct.* f. 410. *Dup. Hist. Nat. Lép. Fr.* vi. 322, pl. 92. *Frey. Beit.* ii. pl. 104.
Æthria glauca, *Hübn Verz. Schmett.* 281, 2183.
Hadena glauca, *Treit. Schmett.* v. 322. *Steph. Ill. Brit. Ent. Haust.* ii. 185. *Guen. Ind.* 244; *Noct.* ii. 94, 801. *Boisd. Ind. Méth.* 119, 931.
Polia glauca, *Herr.-Schæff. Eur. Schmett.* ii. 263, 243.
Noctua aperta, *Geyer, Schmett.* 800.

Europe.

Var. Noctua Lappo, *Dup. Hist. Nat. Lép. Fr.* vii. 255, pl. 116.
Hadena Lappo, *Guen. Ind.* 244. *Boisd. Ind. Méth.* 930.

a. England. Presented by — Labrey, Esq.
b. England. From Mr. Carter's collection.
c—f. England. From Mr. Stephens' collection.
g—i. England.
j—l. Scotland. From Mr. Foxcroft's collection.
m, n. Europe. From M. Becker's collection.

21. Hadena dentina.

Cana; thorax fusco fasciatus; abdomen pallide subtestaceum; alæ anticæ punctis nigris fasciisque variis fuscis nigro marginatis; posticæ cinerascentes, margine lato cinereo-fusco, ciliis albidis.

Var. β. *Alæ anticæ fasciis vix determinatis.*

Var. γ. *Alæ anticæ testaceo tinctæ, fasciis cervinis vix nigro marginatis.*

——— ———, *Engr. Pap. d'Eur.* 856, a—d.

Noctua dentina, *Wien. Verz.* 82, 8. *Fabr. Mant. Ins.* ii. 156, 151; *Ent. Syst.* iii. 2, 69, 196. *Esp. Schmett.* iv. pl. 127, f. 2, 3; pl. 149, f. 4, 5. *Bork. Eur. Schmett.* iv. 415, 166. *Hübn. Eur. Schmett. Noct.* pl. 87, f. 408. *Dup. Hist. Nat. Lép. Fr.* vi. 269, pl. 89. f. 6.

Phalæna-Noctua dentina, *Gmel. ed. Syst. Nat.* i. 5, 2543, 1038.

Astrapetis dentina, *Hübn. Verz. Schmett.* 219, 2188.

Hadena dentina, *Treit. Schmett.* v. 328, 10. *Guen. Ind.* 244; *Noct.* ii. 95, 803. *Boisd. Ind. Méth.* 119, 928.

Noctua (Hadena) dentina, *Meig. Syst. Besch.* iii. 108, 47, pl. 100, f. 5.

Noctua plebeia, *Haw. Lep. Brit.* 107.

Polia dentina, *Herr.-Schæff. Eur. Schmett.* ii. 263, 244.

Hadena plebeia, *Steph. Ill. Brit. Ent. Haust.* iii. 185.

Noctua leucostigma, *Haw. Lep. Brit.* 109.

Hadena leucostigma, *Steph. Ill. Brit. Ent. Haust.* ii. 186.

Var. *Statura paullo major; alæ obscuriores, lineamenta maculaque odontoidea magis conspicua.*

Hadena Latenai, *Pierret, Ann. Soc. Ent. Fr.* vi. 177, pl. 8, f. 3.

Glacier of Montanvert.

a—r. England. From Mr. Stephens' collection.
s—w. England.
x, y. Europe. From M. Becker's collection.
z—aa. France.

22. Hadena nana.

Cinerea, alæ anticæ ocellis duabus discalibus lineisque transversis undulatis exterioribusque denticulatis canis nigro marginatis, ocello interiore et plaga obliqua cana conjunctis; posticæ lunula discali margineque nigricantibus.

——— ———, *Engr. Pap. d'Eur.* 348, a, b.

Noctua nana, *Eur. Schmett.* iv pl. 149, f. 4, 5.

Noctua marmorosa? *Bork. Eur. Schmett.* iv. 170. *Frey. Beit.* i. pl. 4.

Noctua odontites, *Boisd. Ind.* 71.

Hadena marmorosa, *Treit. Schmett.* v. 326; *Suppl.* 45. *Guen. Ind.* 244. *Boisd. Ind. Méth.* 119, 927. *Dup. Hist. Nat. Lép. Fr. Suppl.* vi. 193, pl. 18.
Polia marmorosa, *Herr.-Schæff. Schmett. Eur.* ii. f. 65.
Hadena nana, *Guen. Noct.* ii. 95, 804.

Switzerland. Croatia.

Var. microdon, *Guen. Noct.* ii. 96.

Lapland.

a—d. Europe. From M. Becker's collection.

23. Hadena leucodon.

Fusco-cinerascens; thorax albo nigroque conspersus; alæ anticæ lineis variis albis nigro marginatis, strigis exterioribus nigris, maculis nigro marginatis, orbiculari alba angusta obliqua, reniformi albo marginata, linea submarginali apud medium valde angulosa; posticæ ciliis albis.

Hadena leucodon, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837, 1. *Faun. Volg-Ural.* 219. *Guen. Ind.* 244; *Noct.* ii. 96, 805. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 325, pl. 30. *Herr.-Schæff. Schmett. Eur.* ii. pl. , f. 51.
Noctua leucodon, *Frey. Beit.* iv. pl. 359, f. 1.

South Russia.

24. Hadena peregrina.

Pallide cervina; thorax antice nigro fasciatus; alæ anticæ ex parte pallidissime cervinæ, lineis undulatis incompletis, macularum marginibus ex parte, strigis exterioribus lanceolatis paucis lunulisque marginalibus nigris; posticæ albidæ, venis lineaque marginali fuscescentibus.

Hadena peregrina, *Treit. Schmett.* v. 330, 11; *Suppl.* 45. *Eversm. Faun. Volg-Ural.* 223. *Guen. Ind.* 214; *Noct.* ii. 98, 806. *Boisd. Ind. Méth.* 118, 922.
Noctua peregrina, *Frey. Beit.* pl. 70, 101.
Hadena Salsdæ, *Ramb. Ann Soc. Obs.* 258, pl. 6, f. 1.
Noctua trimenda, *Geyer, Schmett.* f. 789—791.
Hadena contribulis, *Boisd. Ind.* 77.

Noctua contribulis, *Dup. Hist. Nat. Lép. Fr.* vii. 357, pl. 122.
Noctua Blenna? *Geyer, Schmett.* f. 706.

Shores of the Mediterranean.

a, b. Europe. From M. Becker's collection.

25. Hadena Chenopodii.

Cinerea; abdomen pallide cinereum; alæ anticæ annulis duobus discalibus lineisque nonnullis transversis undulosis duplicatis nigricantibus; posticæ albidæ, margine lato fuscescente.

———, *Albin, Ins.* pl. 29, f. 44. *Roës. Ins.* i. pl. 48. *Engr. Pap. d'Eur.* 485, a—c.
Phalæna-Noctua Chenopodii, *Gmel. ed. Syst. Nat.* i. 5, 2543, 1036.
Noctua Chenopodii, *Wien. Verz.* 82, 6. *Fabr. Mant. Ins.* ii. 146, 149; *Ent. Syst.* iii. 2, 191. *Esp. Schmett.* iv. pl. 181. *Bork. Eur. Schmett.* 167. *Hübn. Eur. Schmett. Noct.* f. 86. *Haw. Lep. Brit.* 90. *Dup. Hist. Nat. Lép. Fr.* vii. 31, pl. 102, f. 3.
Noctua verna, *Esp. Schmett.* iv. pl. 117, A, f. 5, 6.
Noctua saucia, *Esp. Schmett.* iv. pl. 152, f. 5.
Hadena Chenopodii, *Treit. Schmett.* vi. 144.
Mamestra Chenopodii, *Steph. Ill. Brit. Ent. Haust.* ii. 195. *Guen. Ind.* 244; *Noct.* ii. 97, 807. *Boisd. Ind. Méth.* 118, 924.
Diataraxia Chenopodii, *Hübn. Verz. Schmett.* 219, 2202.

Europe and North America.

a, b. England. Presented by W. Wing, Esq.
c—v. England. From Mr. Stephens' collection.
u—y. England.
z—dd. Europe. From M. Becker's collection.
ee. Europe. From Mr. Milne's collection.

26. Hadena Farkasii.

Canescens; alæ anticæ cinereæ, fascia lata media obscuriore, lineis transversis nigris cano marginatis, submarginali valde angulosa, orbiculari et reniformi cano marginatis, linea exteriore e guttis albidis; posticæ albæ, margine cinereo.

Hadena Farkasii, *Treit. Schmett. Suppl.* 74. *Guen. Noct.* ii. 97, 808.

Polia Farkasii, *Herr.-Schæff. Schmett. Eur.* ii. 254, pl. 76, f. 390.
Syrmia.

27. HADENA TREITSCHKII.

Cinerea; thorax fasciis fuscis; alæ anticæ lineis transversis undulatis, lituris costalibus, macularum marginibus strigisque exterioribus paucis lanceolatis nigris, lineis transversis angulosis fuscis, reniformi cinerea; posticæ margine lato fuscescente.

Hadena Treitschkii, *Boisd. Ann. Soc. Lin.* 1827, 111, pl. 6, f. 2; *Ind. Méth.* 19, 926. *Treit. Schmett. Suppl.* 69. *Guen. Ind.* 244. *Boisd. Ind. Méth.* 119, 926.
Noctua Treitschkii, *Dup. Hist. Nat. Lép. Fr.* vii. 40, pl. 103, f. 1. *Geyer, Schmett.* f. 850. *Herr.-Schæff. Schmett. Eur.* ii. pl. 14, f. 68, 69.

South France.

28. HADENA SODÆ.

Pallide cinerascens; thorax subfasciatus; alæ anticæ lineis transversis undulatis canis et fuscescentibus, lituris costalibus fuscis, lunulis marginalibus nigricantibus, maculis fusco marginatis, reniformi fasciaque marginali undulata cinereis; posticæ canescentes, margine fusco-cinereo. Mas.—*Antennæ distincte serratæ.*

Hadena Sodæ, *Ramb. Ann. Sci. Obs.* 1829, 260, pl. 6, f. 7. *Boisd. Ind. Méth.* 118, 923. *Treit. Schmett. Suppl.* 68. *Geyer, Schmett.* f. 850. *Guen. Ind.* 244; *Noct.* ii. 98, 811. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 274, pl. 25.
Polia Sodæ, *Herr.-Schæff. Schmett. Eur.* ii. pl. 13, f. 60; pl. 14, f. 66, 67.

a, b. Europe. From M. Becker's collection.

29. HADENA SOCIABILIS.

"*Alæ anticæ cinereæ, lineis tribus transversis luteo subcinereo-albidis lineolis subcinereo-fuscis cinctis, basali sinuata, mediana arcuata, marginali lineamentis tribus sagittatis; macula orbiculari parva rotunda subcinereo-albida fusco-cincta; macula reniformi cinereo-nigricante, macula 3a in figura lunulæ paululum productæ; posticæ cinereo-albidæ, lunula centrali fasciaque marginali cinereis; antennæ subcinereo-fuscæ, filiformes.*"

Hadena sociabilis, *Graslin, Ann. Soc. Ent. Fr. 2me Sér.* viii. 412, 5, pl. 10, f. 13. *Guen. Noct.* ii. 98, 812.

Eastern Pyrenees.

30. Hadena Atriplicis.

Purpureo-fusca; thorax fascia vittisque duabus viridibus; abdomen cinereo-fuscum, cristis nigro-fuscis; alæ anticæ vitta costali fasciis duabus diffusis maculisque viridibus, guttis costalibus subapicalibus strigaque discali albidis, lineis transversis undulatis lunulisque marginalibus nigris; posticæ cinereæ, margine latissimo fusco, ciliis albidis.

———, *Roës. Ins.* i. pl. 31. *Schæff. Ins.* iii. pl. 225. *Wilk. Pap.* 3, pl. 1, a, 2. *Engr. Pap. d'Eur.* 464, a—c. *Sepp. Ins.* iv. pl. 27.

Phalæna-Noctua Atriplicis, *Linn. Faun. Suec.* 1196. *Gmel. ed. Syst. Nat.* i. 5, 2572, 173.

Noctua Atriplicis, *Wien. Verz.* 92, 10. *Fabr. Sp. Ins.* ii. 232, 115; *Mant. Ins.* ii. 169, 227; *Ent. Syst.* iii. 2, 95, 282. *Esp. Schmett.* iv. pl. 168, f. 1. *Bork. Eur. Schmett.* iv. 434, 174. *Hübn. Eur. Schmett. Noct.* pl. 17, f. 83. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 100, f. 1. *Donov. Brit. Ins.* viii. pl. 262. *Haw. Lep. Brit.* 104.

Trachea Atriplicis, *Hübn. Verz. Schmett.* 219, 2203. *Treit. Schmett.* v. 66, 1.

Noctua (Miselia) Atriplicis, *Meig. Handb.* 164, 41; *Syst. Besch.* iii. 127, 80, pl. 102, f. 2.

Hadena Atriplicis, *Curt. Brit. Ent.* f. 431. *Steph. Ill. Brit. Ent. Haust.* iii. 22. *Guen. Ind.* 244; *Noct.* ii. 99, 813. *Boisd. Ind. Méth.* 119, 940.

Polia Atriplicis, *Herr.-Schæff. Eur. Schmett.* ii. 263, 245.

a—g. England. From Mr. Stephens' collection.
h—j. England.
k, l. Europe. From M. Becker's collection.
m, n. Europe. From Mr. Milne's collection.
o, p. Germany.

Group 4.

Statura sat magna. Alæ anticæ fuscæ aut rufescentes, maculis pallidis, linea submarginali optime determinata, læte colorata, lituram bidentatam conspicuam fingente.

Species of rather large size. Fore wings brown or reddish; discal spots more or less pale; submarginal line clearly defined, brightly coloured, forming a very distinct bidentate mark.

31. Hadena suasa.

Murino-fusca; thorax fascia antica undulata nigricante; abdomen murinum; alæ anticæ lineis transversis obsoletis, linea basali et macularum marginibus canis nigro marginatis, linea submarginali biangulata albida, lunulis marginalibus nigris; posticæ cinerascentes, fascia fuscescente.

———, *Engr. Pap. d'Eur.* 478, a—c.

Noctua suasa, *Wien. Verz.* 83, 18. *Bork. Eur. Schmett.* iv. 457, 182. *Hübn. Eur. Schmett. Noct.* pl. 91, f. 426. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 101, f. 7.

Noctua dissimilis, *Knoch, Beitr.* i. pl. 4, f. 1—4. *View.* 98.

Noctua dens canis, *Haw. Lep. Brit.* 85.

Noctua leucographa, *Esp. Schmett.* iv. pl. 150, f. 3.

Diataraxia suasa, *Hübn. Verz. Schmett.* 219, 2201.

Noctua (Mamestra) suasa, *Meig. Syst. Besch.* iii. 139, 105, pl. 104, f. 8.

Hadena suasa, *Treit. Schmett.* v. 136, 4. *Steph. Ill. Brit. Ent. Haust.* ii. 193. *Guen. Ind.* 244; *Noct.* ii. 99, 814. *Boisd. Ind. Méth.* 118, 916.

Var. Hadena aliena, *Dup. Suppl.* iii. 323, pl. 30. (Suasa, *var.* Errata).

Var. Noctua W. latinum, *Esp. Schmett.* iv. pl. 136, f. 3.

a, b. England. Presented by E. Doubleday, Esq.
c—m. England. From Mr. Stephens' collection.
n, o. England.
p—s. Europe. From M. Becker's collection.

32. Hadena aliena.

Subfuscescente-cinerea; abdomen cinereum; alæ anticæ fusco conspersæ, fasciis diffusis subobsoletis fuscescentibus, macula discali lineaque transversa exteriore sordide albidis fusco marginatis; posticæ pallide cinereæ, margine obscuriore.

Noctua aliena, *Hübn. Eur. Schmett. Noct.* f. 441.

Hadena aliena, *Guen. Ind.* 238; *Noct.* ii. 100, 815.

Noctua permixta? *Geyer, Schmett.* f. 803.
Diataraxia aliena, *Hübn. Verz. Schmett.* 219, 2200.

Austria.

Var. Hadena pavida, *Boisd. Ind. Méth.* 120, 943. *Herr.-Schæff. Eur. Schmett.* iii. 280, 306, pl. 97, f. 497.
Hadena Chardinyi?? *Dup. Suppl.* iii. 231, pl. 20.

South Russia.

33. Hadena oleracea.

Rubido-cervina; abdomen testaceum; alæ anticæ macula discali interiore venisque cinereis, macula discali exteriore subquadrata testacea, fascia tenui submarginali denticulata alba; posticæ cinerascentes, ciliis albidis.

———, *Albin, Ins.* pl. 27, 40. *Roës. Ins.* i. pl. 32. *Deg. Ins.* ii. 420, pl. 7. *Sepp, Ins.* iii. pl. 14, f. 7. *Engr. Pap. d'Eur.* 479, a—e. *Rai, Ins.* 166, 21. *Réaum. Ins.* ii. pl. 39, f. 4. *Frisch, Ins.* vii. pl. 21. *Ammir. Ins.* pl. 7.
Phalæna oleracea, *Linn. Faun. Suec*, 1197. *Gmel. ed. Syst. Nat.* i. 5, 2571, 171.
Phalæna dissimilis, *Knoch, Beitr.* i. 57, 12, pl. 4, f. 1—4.
Noctua oleracea, *Wien. Verz.* 83, 19. *Fabr. Sp. Ins.* ii. 233, 122; *Mant. Ins.* ii. 170, 236; *Ent. Syst.* iii. 2, 99, 295. *Esp. Schmett.* iv. pl. 165, f. 4—8. *Bork. Eur. Schmett.* iv. 450, 180. *Hübn. Eur. Schmett. Noct.* pl. 18, f. 87. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 101, f. 6. *Haw. Lep. Brit.* 93.
Noctua Spinaciæ, *Bork. Eur. Schmett.* iv. 454, 181.
Diataraxia oleracea, *Hübn. Verz. Schmett.* 219, 2199.
Noctua (Mamestra) oleracea, *Meig. Handb.* 165, 44; *Syst. Besch.* iii. 139, 104, pl. 104, f. 7.
Mamestra oleracea, *Treit. Schmett.* v. 132, 3. *Steph. Ill. Brit. Ent. Haust.* ii. 193.
Hadena oleracea, *Guen. Ind.* 244; *Noct.* ii. 101, 816. *Boisd. Ind. Méth.* 118, 917.

a, b. England. Presented by W. Wing, Esq.
c—i. England. From Mr. Stephens' collection.
j—m. England.
n, o. Europe. From M. Becker's collection.

34. Hadena Pisi.

Rubida aut cervina; abdomen testaceum; alæ anticæ fasciis nonnullis annulisque duobus discalibus subquadratis obscurioribus et pallidioribus, fascia exteriore denticulata flavescente nigro submarginata; posticæ canescentes, margine fuscescente.

——— ———, *Albin, Ins.* pl. 32, f. 51. *Roës. Ins.* i. pl. 52, *Deg. Ins.* ii. 441. *Sepp, Ins.* iv. pl. 46. *Engr. Pap. d'Eur.* 477, a—e. *Rai, Ins.* 160, 10. *Merian, Ins. Eur.* pl. 50. *Wilk. Pap.* iv. pl. 1, a, 7.

Phalæna-Noctua Pisi, *Linn. Faun. Suec.* 1206. *Gmel. ed. Syst. Nat.* i. 5, 2572, 172.

Noctua Pisi, *Wien. Verz.* 83, 14. *Fabr. Sp. Ins.* ii. 231, 112; *Mant. Ins.* ii. 168, 220; *Ent. Syst.* iii. 2, 93, 275. *Esp. Schmett.* iv. pl. 167, f. 1—5. *Bork. Eur. Schmett.* iv. 446, 179. *Hübn. Eur. Schmett. Noct.* pl. 91, f. 429. *Dup. Hist. Nat. Lép. Fr.* vii. 20, pl. 101, f. 5. *Haw. Lep. Brit.* 193. *Donov. Brit. Ins.* ii. pl. 51.

Hadena Pisi, *Treit. Schmett.* v. 128, 1. *Guen. Ind.* 244; *Noct.* ii. 101, 817. *Boisd. Ind. Méth.* 118, 918.

Mamestra Pisi, *Hübn. Verz. Schmett.* 214, 2136. *Steph. Ill. Brit. Ent. Haust.* iii. 192.

Noctua (Mamestra) Pisi, *Meig. Handb.* 165, 43; *Syst. Besch.* iii. 138, 103, pl. 104, f. 6.

Var. Mamestra splendens, *Steph. Ill. Brit. Ent. Haust.* iii. 192.

Europe. North America.

a—n. England. From Mr. Stephens' collection.
o—v. England.
u, w. Europe. From M. Becker's collection.

35. Hadena splendens.

Rufescens; abdomen canescens, apice pallide rufescens; alæ anticæ fasciis obscurioribus, ocellis duobus discalibus lineaque transversa submarginali canescentibus; posticæ canescentes, fascia subobsoleta margineque lato canescentibus.

Noctua splendens, *Hübn. Eur. Schmett. Noct.* f. 400.

Diataraxia splendens, *Hübn. Verz. Schmett.* 219, 2195.

Hadena splendens, *Treit. Schmett.* v. 131. *Guen. Ind.* 244; *Noct.* ii. 103, 819. *Boisd. Ind. Méth.* 118, 919. *Herr.-Schæff. Schmett. Eur.* ii. f. 396.

Germany.

Group 5.

Statura mediocris aut sat magna. Alæ anticæ maculis lineisque bene determinatis, linea submarginali lituram bidentatam distinctam fingente.

Species of moderate or rather large size. Fore wings with well-defined discal spots and transverse lines; the submarginal line forming a distinct bidentate mark.

36. Hadena thalassina.

Ferruginosa; thoracis fascia biarcuata abdominisque crista nigræ; alæ anticæ guttis costalibus, annulis duobus discalibus (exteriore extus emarginato), linea postica furcata strigisque exterioribus lanceolatis nigricantibus, guttis costalibus, maculis duabus costalibus lineisque transversis angulatis subtestaceis; posticæ cinereæ, litura discali obscuriore, linea postica pallidiore.

——— ———, *Engr. Pap. d'Eur.* 494, a, b.
Noctua thalassina, *Naturf.* ix. 119. *Berl. Mag.* iii. 298. *Bork. Eur. Schmett.* iv. 383, 157. *Dup. Hist. Nat. Lép. Fr.* vi. 292, pl. 91, f. 3. *Frey. Beitr.* i. pl. 27.
Noctua Achates, *Hübn. Eur. Schmett. Noct.* pl. 133, f. 610.
Astrapetis Achates, *Hübn. Verz. Schmett.* 219, 2194.
Noctua (Mamestra) thalassina, *Meig. Syst. Beech.* 142, 109, pl. 105, f. 3.
Noctua humeralis? *Haw. Lep. Brit.* 84.
Hadena thalassina, *Treit. Schmett.* v. 342, 15. *Herr.-Schæff. Eur. Schmett.* ii. 280, 304. *Steph. Ill. Brit. Ent. Haust.* ii. 182. *Guen. Ind.* 244; *Noct.* ii. 103, 820. *Boisd. Ind. Méth.* 120, 949.

a—h. England. From Mr. Stephens' collection.
i—l. England.
m, q. Europe. From M. Becker's collection.

37. Hadena contigua.

Cinerea; cristæ, thoracisque fascia antica et vittæ duæ posticæ obliquæ nigræ; alæ anticæ strigis basalibus, guttis costalibus, annulis duobus plagaque diffusa discalibus, lineis transversis undulatis, strigisque lanceolatis exterioribus nigris, fascia interrupta media lineaque transversa angulata exteriore albis; posticæ canescentes, margine cinerascente.

——— ———, *Engr. Pap. d'Eur.* 472, a—f.
Phalæna-Noctua contigua, *Gmel. ed. Syst. Nat.* i. 5, 2543, 1037.
Noctua contigua, *Wien. Verz.* 82, 7. *Fabr. Mant. Ins.* ii. 156, 151; *Ent. Syst.* iii. 2, 67, 194. *Kléem, Beitr.* i. pl. 42. *Hübn. Eur. Schmett. Noct.* pl. 18, f. 85; pl. 133, f. 609. *Dup. Hist. Nat. Lép. Fr.* vi. 289, pl. 91, f. 2. *Frey. Beitr.* i. pl. 16.
Noctua Ariæ, *Esp. Schmett.* iv. pl. 160, f. 8.
Noctua Spartii, *Brahm, Ins.* 209. *Bork. Eur. Schmett.* iv. 352, 147.
Noctua dives, *Haw. Lep. Brit.* 82.
Astrapetis contigua, *Hübn. Verz. Schmett.* 219, 2189.
Noctua (Mamestra) contigua, *Meig. Syst. Besch.* iii. 143, 111, pl. 105, f. 1.
Hadena contigua, *Treit. Schmett.* v. 352, 18. *Steph. Ill. Brit. Ent. Haust.* ii. 184. *Guen. Ind.* 244; *Noct.* ii. 103, 821. *Boisd. Ind. Méth.* 120, 952. *Herr.-Schæff. Eur. Schmett.* ii. 279, 302.

a—i. England. From Mr. Stephens' collection.
j—q. England.
r, s. Scotland. From Mr. Foxcroft's collection.
t, u. Europe. From M. Becker's collection.
v, w. France.

38. Hadena W-latinum.

Rubida; thorax fascia antica obscuriore; abdomen subtestaceum, cristis nigris; alæ anticæ lineolis transversis indistinctis obscurioribus, costa guttis venarumque punctis albidis et nigricantibus, lineola transversa discali angulata biarcuata albida.

Var. *Thorax fuscescens, cervino varius; alæ anticæ fuscescentes, cervino variæ, strigis duabus basalibus, guttis costalibus maculisque marginalibus nigricantibus, lineola rectangulata discali nigra.*

Var. *Canescens; thorax fascia nigra; alæ anticæ plaga discali fusca, vitta basali, lineis transversis undulatis, annulis duobus discalibus, strigisque exterioribus lanceolatis nigris.*

——— ———, *Engr. Pap. d'Eur.* 473, a, b.
Noctua W-latinum, *Hüfn. Berl. Mag.* iii. 294. *Rottenh. Naturf.* ix. 39. *Esp. Schmett.* iv. pl. 136, f. 2. *Bork. Eur. Schmett.* iv. 378, 155.

Noctua Genistæ, *Pezold, in Scriba, Beitr.* 241, pl. 15, f. 13, 14. *Bork. Eur. Schmett.* iv. 355, 147. *Hübn. Eur. Schmett. Noct.* pl. 134, f. 611, 612. *Dup. Hist. Nat. Lép. Fr.* vi. 285, pl. 91, f. 1. *Frey. Beitr.* i. pl. 22.

Astrapetis Genistæ, *Hübn. Verz. Schmett.* 219, 2190.

Noctua rectilinea, *Haw. Lep. Brit.* 81.

Noctua dives, *Donov. Brit. Ins.* pl. 352.

Noctua (Mamestra) Genistæ, *Meig. Syst. Besch.* ii. 143, 110, pl. 105, f. 2.

Hadena Genistæ, *Treit. Schmett.* v. 349, 17. *Steph. Ill. Brit. Ent. Haust.* ii. 183. *Guen. Ind.* 244. *Boisd. Ind. Méth.* 120, 951. *Herr.-Schæff. Eur. Schmett.* ii. 280, 303.

Hadena W-Latinum, *Guen. Noct.* ii. 104, 822.

Europe and North America.

a—h. England. From Mr. Stephens' collection.
i. England. From Mr. Stevens' collection.
j, k. England.
l—o. Europe. From M. Becker's collection.

39. Hadena grandis.

Fuscescens; thorax cano varius, fascia antica nigro-fusca; abdomen cinerascens; alæ anticæ vitta interrupta nigricante, orbiculari et reniformi magnis pallidis albido marginatis, fascia exteriore albida, strigis submarginalibus nigris linea submarginali angulosa albida interruptis; posticæ cinerascentes, margine fuscescente.

Hadena grandis, *Boisd. Ind. Méth.* 120, 950. *Guen. Ind.* 244; *Noct.* ii. 105, 823.

Lapland. Greenland.

a. New York. Presented by E. Doubleday, Esq.

Group 6.

Xylinæ affinis. Antennæ ciliis magis conspicuis. Alæ anticæ lituris radiatis elongatis.

Allied to *Xylina*. Antennæ more ciliated than in the other groups. Markings of the fore wings radiated longitudinally.

40. Hadena rectilinea.

Cana; thorax fascia antica vittisque duabus lateralibus fuscis nigro marginatis; alæ anticæ fuscæ, nigro lineatæ, costa ex maxima parte, ocellis duabus anticis denticulisque exterioribus et interioribus albis; posticæ albidæ, fascia margineque lato cinereis.

——— ———, *Engr. Pap. d'Eur.* 385, a, b.

Noctua rectilinea, *Esp. Schmett.* iv. 379, pl. 127, f. 1. *Hübn. Eur. Schmett. Noct.* f. 248. *Dup. Hist. Nat. Lép. Fr.* vii. 231, pl. 114. *Frey. Beitr.* pl. 4, c.

Hadena rectilinea, *Treit. Schmett.* vii. 61; *Suppl.* 118. *Eversm. Faun. Volg-Ural.* 294. *Guen. Ind.* 244; *Noct.* ii. 105, 824. *Boisd. Ind. Méth.* 120, 948.

Xylophasia rectilinea, *Steph. Ill. Brit. Ent. Haust.* ii. pl. 179.

Lithomoia rectilinea, *Hübn. Verz. Schmett.* 244, 2425.

Hyppa rectilinea, *Duponch. Herr.-Schæff. Eur. Schmett.* ii. 289, 337. *Steph. Cat Brit. Lep.* 2nd edit. 86, 1.

a. England. Presented by S. Stevens, Esq.
b—d. England. From Mr. Stephens' collection.
e—l. Scotland. From Mr. Foxcroft's collection.
m—q. Europe. From M. Becker's collection.
r, s. Europe. From Mr. Milne's collection.
t. New York. Presented by E. Doubleday, Esq.

Group — ?

41. Hadena hilaris.

H. dentinæ *affinis?* *Alæ anticæ cano fuscoque variæ, macula bifida cum macula ordinaria interiore subtus confluente, striga postica dentata albis.*

Hadena hilaris, *Zett. Ins. Lapp.* 938, 4.

Lapland.

42. Hadena alpicola.

Alæ anticæ læte cinereæ, parce fusco maculatæ, maculis ordinariis canis, harum reniformi in medio rubente; posticæ subcinereæ, basi dilutiores.

Hadena alpicola, *Zett. Ins. Lapp.* 938, 5.

Lapland. Norway.

43. Hadena Lappo.

Alæ anticæ cinereæ fusco nigroque variæ, strigis tribus dentatis distinctioribus nigris extus subcinereo marginatis, maculis ordinariis parvis obsoletis cinerascentibus; posticæ subcinereæ, fimbria tenui alba.

Noctua Lappo, *Dalm. MSS.*
Hadena Lappo, *Boisd. Ind. Méth.* 119, 930. *Zett. Ins. Lapp.* 939, 10.

Lapland.

44. Hadena quadriposita.

Alæ anticæ cinereo-fusco nigroque variæ, striga ad marginem posticum dentata alba intus nigro marginata, maculisque disci quatuor rotundatis albido-cinereis; posticæ fuscæ.

Hadena quadriposita, *Zett. Ins. Lapp.* 939, 11.

Lapland.

45. Hadena extricata.

Alæ anticæ nigricantes cinereo-fuscoque variæ, strigis duabus geminis dentatis, macula ordinaria interiore ovata striolisque basalibus ad costam albis; posticæ fuliginosæ, fimbria alba.

Hadena extricata, *Zett. Ins. Lapp.* 940, 17.

Lapland.

46. Hadena arctica.

"*Alæ anticæ subcinereo fuscoque variæ, maculis ordinariis subobsoletis strigisque tribus albidis, et in striga postica juxta apicem lituris duabus geminis nigris; posticæ subcinereæ.*"

Noctua arctica, *Dalm. MSS.*
Hadena arctica, *Zett. Ins. Lapp.* 939, 12.

Lapland.

47. Hadena lætabilis.

Alæ anticæ subcinereo fuscoque variæ, maculis ordinariis strigisque duabus albidis, juxta apicem lituris duabus nigris; posticæ albidæ, lunula media strigaque tenuissima in summo margine fuscis.

Hadena lætabilis, *Zett. Ins. Lapp.* 940, 14.

Lapland.

48. HADENA AQUILONARIS.

Alæ anticæ cinerascentes obscure fusco nebulosæ, maculis ordinariis obsoletis, margine summo nigro punctato; posticæ subcinereæ immaculatæ.

Hadena aquilonaris, *Zett. Ins. Lapp.* 940, 13.

Lapland.

49. HADENA? MARMORATA.

"*Alæ anticæ subcinereo fuscoque variæ maculis ordinariis strigaque postica undulata pallidis, serie punctorum nigrorum intra marginem apicalem; posticæ fuscæ.*"

Hadena marmorata, *Zett. Ins. Lapp.* 937, 2.

Lapland.

50. HADENA? BOREALIS.

Alæ anticæ obscure fusco-subcinereæ, maculis ordinariis dilutioribus interstitio nigro-fusco, strigaque inter marginem posticum pallida; posticæ fusco-subcinereæ.

Noctua borealis, *Dalm. MSS.*
Hadena? borealis, *Zett. Ins. Lapp.* 941, 19.

Lapland.

51. HADENA? IRIS.

Alæ sordide cinereæ, anticæ striga postica punctorum fuscorum, maculisque ordinariis atro-cinctis.

Hadena? Iris, *Zett. Ins. Lapp.* 941, 22.

Lapland.

52. HADENA? LABECULA.

Alæ anticæ canæ cinereo nebulosæ, maculis ordinariis et una basali interius nigro marginata, albidis, puncto cordiformi submacula ordinaria interiore, nigro; posticæ subcinereæ.

Hadena labecula, *Zett. Ins. Lapp.* 941, 21.

Lapland.

53. Hadena Baltica.

H. adustæ *affinis; alæ rufescente suffusæ.*

Hadena Baltica, *Hering, Ent. Zeit. Stett.* vii. 237, 6.

North Europe.

54. Hadena subcontigua.

Alæ anticæ nigricante-cinereæ, umbrosæ; maculis ordinariis pallidioribus; striga submarginali alba, in medio dentibus duobus obtusis instructa; posticæ cinereæ, externe nigricantes.

Hadena subcontigua, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1852, 155, 5.

South-West Ural.

55. Hadena? multicuspis.

Alæ anticæ fuscescentes, albido radiosæ, macula ordinaria interna horizontali; posticæ fuscescente-cinereæ, ciliis albis.

Hadena multicuspis, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1252, 1, 152, 2.

Steppes South of the Wolga and of the Ural Region.

North America.

Group 1.

Like the second European group.

56. Hadena miselioides.

Viridis; thorax nigro bivittatus, antice cinerascens; abdomen cinereum; alæ anticæ cinereo variæ, lineis transversis undulatis lunulisque marginalibus nigris, maculis nigro ex parte marginatis, reniformi alba magna vix excavata; posticæ fusco-cinereæ, subfasciatæ, lunulis marginalibus nigris.

Hadena miselioides, *Guen. Noct.* ii. 89, 791.

Carolina, New York.

a—c. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

d. North America. From Mr. Milne's collection.

57. HADENA DISTINCTA.

Cana; caput nigro fasciatum; thorax nigro fasciatus et bivittatus; abdomen cinerascens; alæ anticæ fascia obliqua postice abbreviata margineque exteriore fuscis, lineis undulatis albidis nigro marginatis, strigis exterioribus lunulisque marginalibus nigris, maculis magnis albidis nigro ex parte marginatis, plaga apud reniformem subtestacea; posticæ cinereæ, margine tenui nigro.

Achatia vulgaris distincta, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iv. *Noctuæ*, ii. *Genuinæ*, iv. *Achatiæ*, *B. Vulgares*, a, f. 1—4.

Hadena distincta, *Guen. Noct.* ii. 91, 795.

s. Northern United States. Presented by E. Doubleday, Esq.

Group 2.

Like the third European group.

58. HADENA BELLICULA.

Mas. *Fusca; alæ anticæ plaga postmedia antice furcata flava rufo varia, linea transversa arcuata antice furcata alba, linea transversa undulosa subbasali nigris, maculisque duabus mediis nigris, antica extus albo marginata.*

Lithacodia bellicula (Noctua bombycoides, Jaspidia varia), *Hübn. Samml. Exot. Schmett.* i. 18, 43, f. 85, 86.

Georgia. Florida.

Group 3.

Like the fifth European group.

59. HADENA SOMMERI.

Alæ anticæ fusco cinereoque marmoratæ, strigis duabus dentatis nigris albo limbatis, maculis ordinariis cinerascis; posticæ fulvo-cinereæ.

Hadena Sommeri, *Lefebvre, Ann. Soc. Ent. Fr.* 1836, iii. 391, pl. 10, f. 1, 2. *Zett. Ins. Lapp.* 940, 15. *Boisd. Ind. Méth.* 119, 934.

Greenland.

60. Hadena intracta.

Nigricans; thorax antice cinereus; abdomen cinereum; alæ anticæ lineis atris duplicatis indistinctis, strigis submarginalibus guttisque marginalibus nigris, maculis remotis nigro marginatis et notatis, orbiculari cinerea obliqua; posticæ albidæ.

Blackish. Third joint of the palpi less than one-third of the length of the second. Thorax cinereous in front. Abdomen cinereous. Fore wings with the usual lines double, deep black, indistinct; a row of black marginal dots, and a row of black submarginal streaks by the site of the submarginal line, which is obsolete; spots with black borders and slight blackish marks in the disk; orbicular cinereous, oblique, very remote from the reniform, which is hardly larger. Hind wings whitish. Length of the body 7 lines; of the wings 18 lines.

a. Arctic America. Presented by Sir J. Richardson.

The specimen described is much injured, and the specimen may be incorrectly placed here.

Group 4.

Like the sixth European group.

61. Hadena Xylinoides.

Cinerascens; thorax nigro fasciatus, lateribus fuscis nigro vittatis; alæ anticæ ex parte ferruginosæ, vitta interrupta nigra, lineis medianis albis remotis angulosis ex parte nigro marginatis, strigis marginalibus nigris, linea submarginali alba incompleta valde angulosa, maculis albido nigroque marginatis, orbiculari angusta obliqua, reniformi valde excavata; posticæ fusco-cinereæ, ciliis albidis.

Hadena Xylinoides, *Guen. Noct.* ii. 106, 825.

a—c. New York. Presented by E. Doubleday, Esq.

Group ?

62. Hadena? picticollis.

Alæ anticæ cano nigroque variæ, maculis ordinariis fasciaque postica canescentibus; posticæ fuscæ; caput et prothorax alba, hic striga media transversa nigra.

Hadena picticollis, *Zett. Ins. Lapp.* 939, 9.

Greenland.

West Indies.

Group 1.

Like the first European group.

63. Hadena insignis.

Ferrugineo-nigra (mas) *aut ferruginea* (fœm.), *subtus testacea; abdominis latera testacea; alæ anticæ denticulatæ, lineis atris undulatis indistinctis incompletis, linea submarginali e strigis atris ferrugineo terminatis, orbiculari obsoleta, reniformi ferruginea; posticæ pallidissime flavæ, marginibus latissimis æneo-fuscis.*

Male. Ferruginous-black, testaceous beneath. Palpi ascending, vertical; third joint cylindrical, about one-third of the length of the second. Antennæ about half the length of the body. Abdomen testaceous on each side, very distinctly crested, extending for about one-fourth of its length beyond the hind wings. Fore wings distinctly denticulated; transverse lines deep black, undulating, indistinct and incomplete; submarginal line represented by deep black streaks which end in ferruginous dots; orbicular spot obsolete; reniform distinguished by a ferruginous spot. Hind wings very pale yellow, with a very broad æneous-brown border. *Female.*—Ferruginous instead of black. Length of the body 8—9 lines; of the wings 18—20 lines.

a. Jamaica. From Mr. Gosse's collection.
b. Jamaica? Presented by E. Doubleday, Esq.

Group 2.

Like the second European group.

64. Hadena punctirena.

Mas. *Ferruginea; thorax fascia nigricante; abdomen cinereum nigro cristatum; alæ anticæ lineis undulatis valde incompletis, strigis marginalibus nigris e linea submarginali testacea subundulata divisis, maculis nigro marginatis, reniformi litura testacea guttisque tribus albis signata; posticæ candidæ, fusco marginatæ, venis apice nigris, ciliis testaceis.*

Male. Ferruginous. Palpi ascending, almost vertical; third joint cylindrical, about one-third of the length of the second. Antennæ hardly ciliated. Thorax with a blackish band. Abdomen cinereous, with blackish crests, hardly extending beyond the hind wings. Fore wings with the black lines undulating and very incomplete; submarginal line testaceous, slightly undulating, traversing a row of marginal black streaks; some whitish specks along the costa; exterior border denticulated, discal spots with black borders; reniform with a testaceous mark, and with three white dots. Hind wings pure white, shining; borders brown; tips of the veins black; ciliæ testaceous. Length of the body 5½ lines; of the wings 13 lines.

a. St. Domingo. From Mr. Tweedie's collection.

South America.

Group 1.

Like the third European group.

65. Hadena terens.

Cinerea; abdomen canum; alæ anticæ lituris costalibus lineisque undulatis nigris canisque, maculis discalibus albidis indistinctis nigro signatis et marginatis, lunulis marginalibus nigris; posticæ canæ, marginibus fuscescente-cinereis.

Cinereous. Abdomen hoary. Fore wings with black and hoary marks along the costa, and with black and hoary undulating lines, which are indistinct; discal spots whitish, with black centres

and borders, not distinct; a row of black marginal lunules. Hind wings hoary, with brownish cinereous borders. Length of the body 6 lines; of the wings 14 lines.

a. Venezuela. From Mr. Dyson's collection.

66. Hadena intermissa.

Mas. *Cinerea; palpi erecti; abdomen canum, sexualibus magnis late fasciculatis; alæ anticæ lineis nigris undulatis incompletis albido marginatis, maculis discalibus magnis nigro albidoque marginatis, reniformi obscuriore; posticæ canæ.*

Male. Cinereous. Palpi vertical; third joint about one-third of the length of the second. Antennæ distinctly ciliated. Abdomen hoary; appendages large, with long tufts. Fore wings with the lines undulating, black, incomplete, with whitish borders; discal spots large, with black and whitish borders; reniform darker and much larger than the orbicular. Hind wings hoary. Length of the body 6 lines; of the wings 14 lines.

a. Chili. From Mr. Bridges' collection.

Group 2.

Like the fourth European group.

67. Hadena monilis.

Rufo-fusca, alæ anticæ guttis costalibus quinque albis, lineis medianis obsoletis, linea submarginali e guttis flavo-albis, reniformi flavo-alba longa coarctata fusco notata albo strigata, orbiculari subobsoleta; posticæ sordide cinereæ, basi pallidiores, ciliis pallidis.

Hadena monilis, *Guen. Noct.* ii. 102, 818.

Brazil.

68. Hadena basicarnea.

Mas. *Rubra; palpi erecti; abdomen cinereum; alæ anticæ linea alba, extus cupreo-rufæ pallidiores linea informi albida; orbiculari lutea subrotunda, reniformi e gutta postica lutea, costa subapicali albo guttata, margine exteriore ciliis fuscis non denticulato; posticæ cinereæ.*

Male. Blood-red. Palpi erect, ascending to the vertex; third joint conical, not more than one-sixth of the length of the second. Antennæ hardly ciliated. Abdomen cinereous, extending very little beyond the hind wings. Fore wings having a white line with a broad glaucous border at two-thirds of the length, beyond which the red hue is paler, and has a cupreous tinge, and contains an irregular whitish line; orbicular spot luteous, nearly round; reniform spot distinguished by a luteous dot by its hind border; some white dots on the apical part of the costa; exterior border with brown ciliæ, not denticulated. Hind wings cinereous. Length of the body 6 lines; of the wings 14 lines.

a. Venezuela. From Mr. Dyson's collection.

Group 3.

Like the sixth European group.

69. Hadena subjecta.

Mas. *Pallide cervina; thorax fasciis duabus nigricantibus late interruptis; abdomen pallide cinereum; alæ anticæ lituris costalibus et submarginalibus guttisque marginalibus nigris, fascia media lata diffusa fuscescente lineis duabus nigris angulosis inclusa, orbiculari et reniformi subæqualibus nigro ex parte marginatis; posticæ albæ, semihyalinæ, costa margineque interiore testaceis.*

Male. Pale fawn-colour. Third joint of the palpi minute. Antennæ distinctly ciliated. Thorax with two widely interrupted blackish bands. Abdomen pale cinereous. Fore wings with black costal and submarginal marks, and with a row of black marginal dots; ciliæ partly blackish; a broad diffuse brownish middle band, bordered on each side by an angulose black line; the other lines almost obsolete; orbicular and reniform spots with incomplete black borders, the former almost as large as the latter. Hind wings white, semihyaline, testaceous in front and along the interior border. Length of the body 5 lines: of the wings 12 lines.

Brazil. In Mr. Saunders' collection.

Group?

70. HADENA? GLAUCA.

Fusca; abdomen cervinum; alæ anticæ purpureo-glaucescentes, lituris variis fasciisque cervinis; posticæ cervinæ, ciliis pallidioribus.

Phalæna-Noctua Glauca, *Cram. Pap. Exot.* iv. 45, pl. 311, f. G.

Surinam.

71. HADENA? TANAIS.

Cervina; alæ anticæ nigro fasciatæ et antice maculatæ; posticæ fuscæ, fasciis duabus posticis pallidioribus.

Phalæna Tanais, *Cram. Pap. Exot.* i. 106, pl. 68, f. D.
Acolasis Tanais, *Hübn. Verz. Schmett.* 256, 2522.

Surinam.

72. HADENA? PLACIDA.

Fusca; abdomen testaceum fasciis fuscis; alæ anticæ lineis transversis nigris et glaucescentibus, macula postica nigra glaucescente marginata, guttis submarginalibus nigris; posticæ basi strigisque duabus apud angulum interiorem testaceis.

Phalæna-Noctua Placida, *Cram. Pap. Exot.* iv. 134, pl. 359, f. 3.

Surinam.

73. HADENA PSITTACUS.

Viridis; abdomen cinereum; alæ anticæ costa flavescente, ciliis luteis, fasciis variis, macula postica plagaque discali nigris, orbiculari et reniformi nigris viridi marginatis; posticæ nigricantes, ciliis luteis.

Noctua psittacus, *Moriz, MSS. Herr.-Schæff. Lep. Exot. Sp. Nov.* f. 216.

Venezuela.

74. Hadena? bipartita.

Cinerea; alæ anticæ dimidio basali viridescente, fasciis mediis basalique fuscescentibus nigro marginatis, illis antice approximatis, guttis discalibus, fascia exteriore maculari, macula subapicali extus rufo lineata, linea submarginali guttisque marginalibus nigris; posticæ basi albidæ.

Noctua bipartita, *Herr.-Schæff. Lep. Exot. Sp. Nov.* f. 128.

Surinam.

Africa.

Group 1.

Like the second European group.

75. Hadena depulsa.

Mas et fœm. *Fusco-cinerea; palpi porrecti; thorax fascia antica tenui nigra; abdomen* maris *apice cervino pilosum; alæ anticæ nigro-cinereæ, lineis nigris undulatis testaceo marginatis, maculis testaceis obliquis postice approximatis albido marginatis, orbiculari maculaque postica intermedia testacea connexis, lunulis marginalibus nigris, ciliis basi albido-testaceo guttatis; posticæ pallide cinereæ, marginibus latis fusco-cinereis.*

Male and female. Brownish cinereous. Palpi porrect. Antennæ very minutely ciliated. Thorax with a slender black band in front. Abdomen of the male with fawn-coloured apical hairs. Fore wings blackish cinereous; transverse lines black, undulating, with pale testaceous borders; discal spots testaceous, oblique, inclined to each other hindward, with whitish borders, the orbicular connected with a testaceous intermediate mark; marginal lunules black, very slender; ciliæ with whitish testaceous basal dots. Hind wings pale cinereous, with broad brownish cinereous borders. Length of the body 5 lines; of the wings 14 lines.

a, b. Cape. From M. Dregé's collection.

Group 2.

Like the fifth European group.

76. Hadena consummata.

Mas. *Nigro-fusca; caput ferrugineum; thorax margine antico vittaque ferrugineis; abdomen pallidum, apice fulvum; alæ anticæ guttis costalibus et marginalibus albidis, lineis nigris undulatis, maculis nigro marginatis, orbiculari subobliqua, reniformi cervino maculata, strigis exterioribus nigris testaceo notatis; posticæ fuscescente-cinereæ.*

Male. Blackish brown. Head ferruginous. Third joint of the palpi cylindrical, about one-third of the length of the second. Antennæ very minutely ciliated. Thorax ferruginous in front, and with a ferruginous stripe. Abdomen a little paler than the thorax, tawny at the tip. Fore wings with minute whitish costal and marginal dots; transverse lines undulating, black, the two exterior almost obsolete; discal spots with black borders; claviform with a black disk; orbicular slightly oblique, hardly half the size of the reniform, which contains a fawn-coloured spot; an exterior row of cuneiform black streaks, which contain testaceous marks. Hind wings brownish cinereous. Length of the body 9 lines; of the wings 20 lines.

Port Natal. In Mr. Saunders' collection.

Group 3.

77. Hadena? cinctithorax.

Mas. *Pallide cervina; thorax nigro fasciatus; abdomen albido-testaceum; alæ anticæ lituris costalibus guttisque marginalibus nigris, maculis duabus subapicalibus nigricantibus, linea submarginali e guttis nigris, maculis discalibus nigris cinereo notatis, orbiculari parva; posticæ albæ.*

Male. Pale fawn-colour. Palpi ascending; third joint not more than one-fourth of the length of the second. Antennæ slightly ciliated. Thorax with a black band. Abdomen whitish testaceous. Fore wings with some black marks along the costa, and with black marginal dots; two blackish spots on the fore part between the border and the submarginal line, which is composed of black dots, and is rather remote from the border; the other lines indicated by a few black dots; discal spots black, with cinereous

marks, the orbicular about half the size of the reniform. Hind wings white; under side with a row of small black streaks, and with black marginal dots. Length of the body 5 lines; of the wings 12 lines.

a. South Africa. Presented by Dr. A. Smith.

78. Hadena? lutescens.

Flava; abdomen cinereum; alæ anticæ olivaceo nebulosæ, fasciis angulosis interruptis, macularum marginibus, macula postica guttisque ciliaribus albis; posticæ cinereæ, fascia obscuriore, margine exteriore pallidiore.

Noctua lutescens, *Herr.-Schæff. Lep. Exot. Sp. Nov.* f. 127.

Cape.

This species may belong to the genus *Polia*.

Asia.

Group 1.

Like the second European group.

79. Hadena indistans.

Mas et fœm. *Corticino-fusca*, H. occlusæ *similis; alæ anticæ subdenticulatæ, lineis maculisque obscurioribus, macula discali subquadrata nigricante, linea submarginali e angulis ochraceis nigricante marginatis, margine exteriore obscuriore, reniformi indistincta cinereo conspersa; posticæ fusco-cinereæ, basi pallidiores.*

Hadena indistans, *Guen. Noct.* ii. 87, 786.

Central Hindostan.

80. Hadena subcurva.

Mas. *Nigro-ferruginea, subtus testacea; palpi erecti; antennæ vix ciliatæ; abdomen cinereum; alæ anticæ lineis nigris undulatis indistinctis ferrugineo submarginatis, strigis duabus exterioribus lunulisque marginalibus nigris, his ferrugineo marginatis, orbiculari et reniformi indistinctis, hac ferrugineo gutta, margine exteriore denticulato; posticæ æneæ, antice cinereæ, ciliis albidis.*

Male. Blackish ferruginous, testaceous beneath. Palpi vertical, testaceous beneath; third joint lanceolate, about one-fourth of the length of the second. Antennæ almost bare. Abdomen cinereous, crested, hardly extending beyond the hind wings. Fore wings with the transverse lines black, undulating and indistinct, with somewhat ferruginous borders; two exterior black streaks; marginal lunules black, with ferruginous border; orbicular and reniform spots indistinct, the latter marked by a ferruginous dot; exterior border denticulated. Hind wings æneous, cinereous in front, with whitish ciliæ; under side cinereous, with a brown discal spot and an æneous border. Length of the body 5 lines; of the wings 12 lines.

a. Ceylon. From the Rev. J. Wenham's collection.

81. Hadena niveiplaga.

Mas. *Nigro-fusca, subcinerascens; alæ anticæ lituris costalibus lineisque undulatis duplicatis, lunulisque marginalibus nigris, maculis nigro marginatis, reniformi albo guttata, margine exteriore subdenticulato; posticæ obscure cinereæ.*

Male. Blackish brown, with a slight cinereous tinge. Palpi obliquely ascending; third joint cylindrical, slender, hardly more than one-fourth of the length of the second. Antennæ minutely ciliated. Fore wings with black costal marks, and with double undulating black lines, the space between each pair almost black; a row of black marginal lunules; discal spots with black borders; orbicular indistinct, reniform distinguished by the white spot which occupies its disk; exterior border slightly denticulated. Hind wings dark cinereous; under side with a black discal spot, and an exterior black transverse line. Length of the body 6½ lines; of the wings 17 lines.

Hindostan. In Mr. Saunders' collection.

Group 2.

Like the third European group.

82. Hadena consanguis.

Pallidissime ochracea; thorax cinerascente varius; alæ anticæ cinereo nebulosæ, dimidio exteriore rufescente tincto, lineis punctisque confusis, submarginali distincta maculisque exterioribus ferrugineis approximatis, orbiculari et reniformi fere contiguis, hac angusta, illa rotundata pallida, claviformi e annulo fusco; posticæ nigricantes, basi albæ.

Hadena consanguis, *Guen. Noct.* ii. 97, 810.
Central Hindostan.

Group 3.

Like the fourth European group.

83. HADENA POSTICA.

Fœm. *Obscure ferruginea, subtus albida; abdomen cinereum, crista nigricante; tarsi fasciis pallidis; alæ anticæ denticulatæ, sat angustæ, lineis nigris incompletis, linea submarginali obsoleta, orbiculari et reniformi guttisque costalibus et marginalibus pallide ferrugineis, strigis duabus exterioribus informibus nigris; posticæ cupreæ, basi cinereæ.*

Female. Very dark ferruginous, whitish beneath. Palpi obliquely ascending, whitish beneath; third joint conical, not more than one-sixth of the length of the second. Abdomen cinereous, with a blackish crest. Tarsi with pale bands. Fore wings rather narrow, denticulated along the exterior border; transverse lines black, irregular and incomplete; submarginal line obsolete; discal spots pale ferruginous; two dislocated black streaks proceeding from near the reniform spot to the exterior border; some pale ferruginous costal and marginal dots. Hind wings cupreous, cinereous towards the base. Length of the body 6 lines; of the wings 14 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Group —?

84. HADENA? ARIDA.

Mas. *Sordide flavescens; palpi ascendentes, articulo 2o cylindrico; alæ anticæ lineis transversis distinctis undulatis, orbiculari et reniformi conspicuis pallido marginatis, illa obliqua elongata; posticæ pallide flavo-cinereæ, ciliis pallidioribus, linea discali nigricante.*

Hadena arida, *Lederer, Verhandl. Zool. Botan. Verein in Wien.* v. 108, f. 7.

Altai, Siberia.

85. Hadena felina.

Alæ anticæ cinerascente-albæ, margine externo, costa maculisque tribus costalibus nigris; posticæ nigricantes, basi pallidiores.

Hadena felina, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1852, 1, 156, 6.

Russian Armenia.

86. Hadena? bidens.

Alæ anticæ nigricantes, nigro adumbratæ; linea transversa externa lineaque submarginali albidis, hac medio bidentata; maculis ordinariis albido circumscriptis; posticæ nigricante-cinereæ, fascia lata terminali nigra.

Hadena bidens, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1852, 1, 153, 3.

East Siberia.

87. Hadena? furca.

"*Alæ anticæ e purpurascente-fuscescentes, fusco adumbratæ; striga submarginali dentibus duobus acutis instructa; macula interna ordinaria lineari, obliqua foras, sub venam medianam in dentes duos acutissimos excurrente, albida; posticæ fuscescente-cinereæ, externe nigricantes.*"

Hadena furca, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1852, 1, 154, 4.

East Siberia.

88. Hadena trisignata.

"*Thorax et abdomen subcinerea, hoc infuscatum; alæ anticæ subcinereo-fuscescentes, lineis tribus longitudinalibus* (2 *basi, altera discali*) *aterrimis,—maculis ordinariis fusco circumscriptis externa alba,—strigis ordinariis cinereo pallidis, submarginali albo denticulata; posticæ sericeo albidæ, externe fusco adumbratæ.*"

Hadena trisignata, *Ménétriés, Mém. Acad. Imp. Sci. St. Petersb. 6me Sér. Sci. Nat.* vi. 286, 835, pl. 6, f. 9.

Tureomania.

Australia.

Group 1.

Like the first European group.

89. Hadena aplectoides.

Mas. *Alba, cinereo conspersa; alæ anticæ subdenticulatæ, spatio medio fusco-nigro, lineis angulosis, orbiculari et reniformi approximatis albis disco fuscis nigro marginatis, illa ovata obliqua, claviformi nigra oblonga, linea submarginali vaga postice nigro nebulosa; posticæ nigricantes, lineis duabus pallidis subobsoletis.*

Hadena aplectoides, *Guen. Noct.* ii. 83, 777.

Australia.

Group 2.

Like the second European group.

90. Hadena expulsa.

Var.? Fœm. *Fusca; thorax albido conspersus; abdomen cinereum; alæ anticæ denticulatæ, lineis nigris undulatis, mediana exteriore et submarginali albido marginatis, hac subundulata, maculis nigro marginatis, orbiculari magna subobliqua apud medium contracta, reniformi ex maxima parte alba, ciliis albido strigosis; posticæ æneo-fuscæ, basi cinereæ, ciliis ex parte albidis.*

Hadena expulsa, *Guen. Noct.* ii. 93, 800.

Var.? *Female.* Brown. Palpi ascending; third joint conical, not more than one-sixth of the length of the second. Thorax with whitish speckles. Abdomen cinereous, crested. Fore wings denticulated; lines black and undulating; exterior median line and submarginal line with whitish borders, the latter slightly undulating; spots bordered with black; orbicular slightly oblique, as large as the reniform, contracted in the middle; reniform mostly white; ciliæ with whitish streaks. Hind wings æneous-brown, cinereous towards the base; ciliæ partly whitish. Length of the body 6 lines; of the wings 16 lines.

a. Tasmania. From Mr. A. J. Smith's collection.

91. Hadena familiaris.

Ferruginea; palpi porrecti; antennæ subciliatæ, sat validæ; thorax lituris nonnullis nigro-fuscis; abdomen cinereo-fuscum; alæ anticæ subdenticulatæ, lineis undulatis duplicatis nigris et pallidis, linea submarginali et striya antica pallida approximatis, orbiculari magna indistincta, reniformi apud discum alba, lunulis marginalibus nigris; posticæ æneo-fuscæ, ciliis pallidis.

Ferruginous. Palpi porrect; third joint cylindrical, about one-third of the length of the second. Antennæ rather stout, very minutely ciliated. Thorax with some blackish brown marks. Abdomen cinereous-brown, hardly extending beyond the hind wings. Fore wings with the transverse lines undulating, double, black and pale; costa with corresponding marks; submarginal line accompanied by a pale streak in front; orbicular spot indistinct, nearly as large as the reniform, which has a white disk; a row of black lunules along the exterior border, which is slightly denticulated. Hind wings æneous-brown, with pale ciliæ. Length of the body 6 lines; of the wings 14 lines.

a. Tasmania. From Mr. A. J. Smith's collection.

92. Hadena trijuncta.

Cana; palpi vix ascendentes, articulo 3o minimo; abdomen cinereum, cristis fuscis optime determinatis; alæ anticæ apud medium obscuriores, lineis nigris distinctis, maculis nigro marginatis, orbiculari subrotunda, linea submarginali albida angulosa, strigis marginalibus nigris, ciliis fuscis apud venas albis; posticæ cupreo-fuscæ, ciliis albis.

Hoary. Palpi hardly ascending; third joint elongate-conical, hardly one-fourth of the length of the second. Abdomen cinereous; crests brown, high. Fore wings with the basal and median lines black, distinct; middle space darker than the wing elsewhere; spots with black borders; orbicular and reniform spots contiguous to the hind spot, but not to each other; orbicular nearly round; submarginal line whitish, angulose, accompanied by black streaks; ciliæ brown, white opposite the veins. Hind wings cupreous-brown, with white ciliæ. Length of the body 7 lines; of the wings 14 lines.

a. Tasmania. Presented by J. G. Children, Esq.

Group 3.

Like the third European group.

93. Hadena Lutra.

Var.? Mas. *Ferruginea; palpi erecti; thorax fasciis nigricantibus; abdomen nigro-cinereum, cristatum; alæ anticæ subdenticulatæ, apud marginem exteriorem nigro-cinereæ, lineis nigris duplicatis undulatis indistinctis, submarginali testacea subundulata, maculis testaceo nigroque marginatis, reniformi testaceo notata, margine postice albo, macula exteriore testacea; posticæ cupreo-fuscæ, basi cinereæ, ciliis ex parte albis.*

Hadena Lutra, *Guen. Noct.* ii. 94, 802.

Var.? *Male.* Ferruginous. Palpi vertical; third joint conical, not more than one-sixth of the length of the second. Antennæ distinctly ciliated. Thorax with blackish bands. Abdomen blackish cinereous, crested. Fore wings slightly denticulated, grayish black between the submarginal line and the exterior border, and with a tinge of the same near the posterior angle; the usual lines black, double, undulating, indistinct; submarginal line testaceous, slightly undulating; discal spots with testaceous and black borders; orbicular oblique; reniform with the testaceous border dilated, with a testaceous discal mark, and with the hind part of the border white; a testaceous spot between it and the submarginal line. Hind wings cupreous-brown, cinereous towards the base; cilia partly white. Length of the body 7 lines; of the wings 16 lines.

a. Tasmania. Presented by Morton Allport, Esq.

94. Hadena congregata.

Fœm. *Cinerea; palpi suberecti; thorax nigro conspersus; alæ anticæ nigro conspersæ, lineis nigris duplicatis undulatis indistinctis incompletis, submarginali e strigis nigris, lunulis marginalibus nigris minutis, orbiculari parva albida rotunda; reniformi nigricante, strigis duabus albidis; posticæ cinereæ.*

Female. Cinereous. Palpi ascending, nearly vertical; third joint conical, not more than one-fourth of the length of the second. Thorax speckled with black. Abdomen extending very little beyond the hind wings. Fore wings speckled with black; transverse

lines black, double, undulating, indistinct and incomplete; submarginal line marked by black streaks; marginal lunules black, minute; orbicular spot small, whitish, round; reniform blackish, with two whitish streaks. Hind wings cinereous. Length of the body 6 lines; of the wings 14 lines.

a. Tasmania. From Mr. A. J. Smith's collection.

Group 4.

Like the fourth European group.

95. HADENA BISTRIGULA.

Mas. *Ferrugineo-fusca, subtus cinerea; antennæ serratæ; thorax cinereo fasciatus; abdomen cinereum; alæ anticæ lineis undulatis indistinctis pallide ferrugineis et nigricantibus, submarginali subrecta strigisque nigris interioribus approximatis, guttis marginalibus testaceis, orbiculari e gutta, reniformi e strigis duabus albis; posticæ æneo-cinereæ, ciliis albidis.*

Male. Ferruginous-brown, cinereous beneath. Palpi partly cinereous, stout, short, ascending; third joint conical, nearly one-third of the length of the second. Antennæ serrated. Thorax with cinereous bands. Abdomen cinereous, hardly extending beyond the hind wings. Fore wings with the lines pale ferruginous and blackish, undulating, not distinct; submarginal line nearly straight, accompanied by some black streaks on its inner side; a row of testaceous marginal dots; orbicular and reniform spots distinguished by white marks, orbicular by a dot, reniform by two streaks, of which the outer one is curved and dilated in the middle. Hind wings cinereous, with a slight æneous tinge; ciliæ whitish. Length of the body 6 lines; of the wings 14 lines.

a, b. Australia. Presented by Major-General Hardwicke.
c. Tasmania. From Mr. A. J. Smith's collection.
d. Adelaide. From Mr. Stevens' collection.

96. HADENA EXTIMA.

Fœm. *Cinereo-nigra, subtus cinerea; palpi subascendentes; abdomen obscure cinereum, cristis nigris; alæ anticæ lineis atris undulatis indistinctis, orbiculari et reniformi magnis atro marginatis, illa majore, margine exteriore vix denticulato; posticæ fuscescentes, antice albidæ.*

Female. Grayish black, cinereous beneath. Palpi slightly ascending; second joint rather long; third conical, not one-fourth of the length of the second. Abdomen dark cinereous, with black crests, extending a little beyond the hind wings. Fore wings with the usual lines deep black, undulating, indistinct; spots large, with deep black borders; orbicular rather larger than the reniform; exterior border very slightly denticulated. Hind wings brownish, whitish in front. Length of the body 5 lines; of the wings 14 lines.

a. Australia. Presented by Sir G. Grey.

Group 5.

Like the fifth European group.

97. Hadena punctisigna.

Mas. *Ferruginea; antennæ subsetaceæ; thorax fusco fasciatus; abdomen cinereum; alæ anticæ lituris costalibus nigris pallidisque, lineis transversis angulosis pallidis nigro marginati, linea submarginali undulata, venis marginalibus nigro-cinereo nebulosis, lunulis marginalibus nigris, orbiculari et reniformi nigro marginatis, postice nigro-cinereo nebulosis, orbiculari magna, reniformi testacea; posticæ ferrugineo-cinereæ, ciliis rufescentibus.*

Male. Ferruginous. Third joint of the palpi cylindrical, about one-third of the length of the second. Antennæ minutely setaceous. Thorax with brown bands. Abdomen cinereous. Fore wings with black and pale marks along the costa; transverse lines angulose, pale, with blackish borders; submarginal line undulating, the veins between it and the exterior border clouded with blackish gray; a row of black marginal lunules; a large brown patch behind the discal spots, which are mostly bordered with black, and have their hind parts clouded with blackish gray; orbicular spot elongated, oblique, larger than the reniform, which is mostly testaceous. Hind wings cinereous, with a ferruginous tinge; ciliæ reddish. Length of the body 7 lines; of the wings 18 lines.

a. Tasmania. From Mr. A. J. Smith's collection.
b. Tasmania. Presented by Morton Allport, Esq.

Group 6.

Like the sixth European group.

98. HADENA ASPERA.

Cinerea; thorax lineis duabus obliquis lateralibus nigris; abdomen canum: alæ anticæ lineis tribus nigris et albis undulatis optime determinatis, submarginali valde indistincta, lunulis marginalibus nigris, maculis albis disco cinereis nigro marginatis, orbiculari elliptica vix obliqua, reniformi extus valde excavata; posticæ albæ, cinereo marginatæ, lunulis marginalibus nigris.

Cinereous. Thorax with a black oblique line on each side. Abdomen hoary. Fore wings with three very distinct undulating black and white lines; submarginal line very indistinct; a row of black marginal lunules; spots white, very distinct, with cinereous centres and black borders; orbicular elliptical, hardly oblique; reniform much excavated on the outer side. Hind wings white, with cinereous borders and black marginal lunules. Length of the body 7 lines; of the wings 14 lines.

a. Australia. From Mr. Argent's collection,

New Zealand.

Group 1.

Like the second European group.

99. HADENA PICTULA.

Mas. *Nigricante-fusca; caput et thorax luteo varia; abdomen roseo bivittatum, cristis luteis; pedes ex parte lutei; alæ anticæ glauco-cinereæ, lineis maculisque distinctis luteis nigris que, costa basi subtus rosea; posticæ æneo-fuscæ, subtus disco roseo, macula nigricante.*

Dianthecia pictula, *White*, *Taylor*, *Te Ika a mani*, *New Zealand*, pl. 1, f. 3.

New Zealand.

Male. Blackish brown. Head and thorax with luteous stripes and bands. Abdomen with a broad bright rosy stripe on

each side; crests luteous. Legs partly luteous. Fore wings glaucous-gray; the lines and spots distinct, luteous and black; costa rosy at the base beneath. Hind wings æneous-brown; under side rosy; discal spot blackish; border æneous-brown. Length of the body 7 lines; of the wings 16 lines.

a. New Zealand. From M. Dohrn's collection.
b. New Zealand. Presented by Col. Bolton.

Group 2.

Like the sixth European group.

100. Hadena mutans.

Mas et fœm. *Pallide cinerea; thorax fascia antica arcuata nigra; alæ anticæ apud discum cervino et nigro-cinereo nebulosæ, lituris costalibus vitta discali venisque nigris, lineis subobsoletis, submarginali distincta albida subundulata nigro-fuscoque marginata, orbiculari et reniformi distinctis ex parte nigro marginatis, illa obliqua; posticæ cinereæ, ciliis albidis.*

Var. *Alæ anticæ disco vix nebuloso, vitta nigra subobsoleta.*

Allied to *Xylina*. *Male and female.* Pale cinereous. Third joint of the palpi cylindrical, full one-third of the length of the second. Antennæ of the male minutely ciliated. Thorax with a black curved band in front. Fore wings with black marks along the costa; most of the disk clouded with fawn-colour and with blackish gray; lines almost obsolete, except the submarginal one, which is distinct, whitish, slightly undulating, bordered on each side by black and brown, and interrupted by the black veins; a black discal stripe, dilated towards its tip, and widely interrupted by the space which includes the black-bordered claviform spot; orbicular and reniform spots distinct, partly bordered with black, the former oblique, a little more than half the size of the latter. Hind wings cinereous, with whitish ciliæ.

Var. Fore wings with the disk hardly clouded; black stripe obsolete, except at each end. Length of the body 6—7 lines; of the wings 14—16 lines.

a—*i*. New Zealand. Presented by Col. Bolton.
j. New Zealand. Presented by the Rev. W. Colenso.
k. New Zealand. Presented by Dr. Sinclair.

101. Hadena lignifusca.

Mas. *Fuscescens; thorax fascia angulata nigra; abdomen pallidum; alæ anticæ lituris costalibus, striga basali strigaque postica nigris, lineis transversis subobsoletis, orbiculari et reniformi pallido marginatis, guttis paucis costalibus subapicalibus albis, linea submarginali distincta undulata albida nigro marginata, venis marginalibus nigris; posticæ cinereæ.*

Male. Wood-coloured brown. Thorax with an angular black band. Abdomen paler than the thorax. Fore wings with black marks along the costa, with a black basal streak, and with a broader black streak, which, however, varies in size near the posterior angle; transverse lines very indistinct; claviform very distinct; orbicular and reniform with paler borders, of the usual form; two or three minute white dots near the tip of the costa; submarginal line distinct, undulating, whitish, with black borders; veins black between it and the border. Hind wings cinereous. Length of the body 6—7 lines; of the wings 14—16 lines.

a—c. New Zealand. Presented by Col. Bolton.

Genus 23. HORMA.

Corpus robustum. Proboscis brevis. Palpi validi, porrecti, caput paullo superantes; articulus 3us minimus. Antennæ corporis dimidio vix longiores. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo. *Mas.*—Antennæ sat pectinatæ.

Body stout. Proboscis short. Palpi stout, pilose, porrect, extending a little beyond the head; third joint extremely minute. Antennæ about half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings rather narrow. Fore wings straight in front, rounded at the tips, moderately oblique along the exterior border. *Male.*—Antennæ moderately pectinated.

1. Horma æruginea.

Canescens; thorax fusco fasciatus; alæ anticæ fascia lata antice dilatata maculas includente lineis duabus nigris marginata, lituris costalibus lineolisque marginalibus nigris, maculis albido variis; posticæ albæ.

Noctua æruginea, *Hübn. Eur. Schmett. Noct.* f. 374. *Dup. Hist. Nat. Lép. Fr.* vi. 301, pl. 94, f. 6. *Frey. Beit.* iii. pl. 237.
Hadena æruginea, *Treit. Schmett.* v. 355. *Guen. Ind.* 244: *Noct.* ii. 90, 792. *Boisd. Ind. Méth.* 954. *Herr.-Schæff. Eur. Schmett.* ii. 281, 309.
Dichonia æruginea, *Hübn. Verz. Schmett.* 217, 2174.
Var. Noctua mioleuca, *Hübn. Noct.* f. 745, 746.
Noctua chioleuca? *Frey. Beit.* iii. pl. 279, f. 2, 3.
Hadena mioleuca, *Herr.-Schæff. Eur. Schmett.* ii. 281, 308.
Hadena chioleuca, *Treit. Suppl.* 46.

France. Austria. Italy. Hungary.

a.—d. Europe. From M. Becker's collection.

2. Horma mioleuca.

Hadena mioleuca, *Treit. Schmett. Suppl.* 43. *Guen. Noct.* ii. 90, 793.

Sicily.

3. Horma? bombycina.

Antennæ pectinatæ; alæ anticæ fuscæ, cinereo nebulosæ, macularum ordinariarum marginibus, venis dentibusque duobus externis albis; macula reniformis basi lata.

Hadena bombycina, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xx. 378, 14, pl. 6, f. 1, 2.
Hadena leucophora, *Eversm. Faun. Lepid.* 222, 9.

Ural Mountains.

4. Horma? Bombycia.

Alæ anticæ nigro-fuscæ, lineis duabus transversis crenulatis nigris; venis, maculis ordinariis ciliisque uniformibus subcinereis; alæ posticæ subcinereo-nigricantes.

Hadena Bombycia, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1851, xxiv. No. 2, 632, 19.

Eastern Siberia.

Genus 24. ERANA.

Mas. Corpus sat validum. Proboscis mediocriter longa. Palpi porrecti, caput paullo superantes; articulus 3us minutus. Antennæ simplices, corporis dimidio multo longiores. Thorax cristatus. Abdomen cristatum, alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter latæ, apud costam rectæ, apice subrotundatæ, margine exteriore vix obliquo; posticæ latæ, margine antico dilatato fasciculato.

Male. Body moderately stout. Proboscis moderately long. Palpi porrect, extending a little beyond the head; third joint not more than one-fourth of the length of the second. Antennæ simple, much more than half the length of the body. Thorax and abdomen crested, the latter extending a little beyond the hind wings Legs stout; hind tibiæ with long spurs. Fore wings moderately broad, straight in front, somewhat rounded at the tips, hardly oblique along the exterior border, Hind wings broad, dilated, and with a tuft of long hairs in front.

1. Erana graminosa.

Mas. *Flavo-viridis; thorax antice nigro fasciatus; abdomen flavo-cinereum; tarsi nigro fasciati; alæ anticæ lineis angulosis albidis nigro marginatis, lituris costalibus nigris, orbiculari et reniformi albis nigrisque non bene determinatis; posticæ cinereæ, lunulis posticis nigris albo marginatis.*

Male. Yellowish green. Thorax with a transverse black line in front. Abdomen yellowish cinereous. Tarsi with black bands. Fore wings with whitish black-bordered zigzag lines, and with corresponding black marks along the costa; external line broader and with a broader border; discal spots whitish and black, not very distinctly marked. Hind wings cinereous, with black white-bordered slender marginal lunules. Length of the body 7 lines; of the wings 16 lines.

a. New Zealand. From Mr. Churton's collection.

Genus 25. CASANDRIA.

Mas. Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, validi, caput paullo superantes; articulus 3us minimus. Antennæ subciliatæ, sat validæ. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ anticæ longæ, mediocriter latæ, apud costam rectæ, apice rotundatæ, margine exteriore vix obliquo.

Male. Body stout. Proboscis moderately long. Palpi porrect, stout, extending a little beyond the head; third joint not more than one-sixth of the length of the second. Antennæ rather stout, very minutely ciliated. Abdomen extending for one-third of its length beyond the hind wings. Legs stout; hind tibiæ with long spurs. Fore wings long, moderately broad, quite straight in front, rounded at the tips, hardly oblique along the exterior border.

1. Casandria emittens.

Fœm. *Pallidissime cervina; thorax antice fuscescens; alæ anticæ vix viridi tinctæ, nigro subconspersæ, lituris costalibus nigris, lineis subobsoletis, una exteriore fusca recta intus nigro marginata, striga nigra fasciaque viridescente exterioribus, macula magna costali nigro-cinerea guttisque duabus strigaque approximatis nigris, guttis submarginalibus nigris albisque, lunulis marginalibus nigris minimis, ciliis nigro maculatis, orbiculari et reniformi albido marginatis, illa transversa non obliqua; posticæ albidæ iridescentes subhyalinæ, marginibus latis fuscescentibus.*

Female. Very pale fawn-colour. Thorax brownish in front. Fore wings slightly flecked with black, with an indistinct green tinge and with transverse black marks along the costa; transverse lines almost obsolete, excepting one beyond the reniform spot, which line is brown, straight, and not oblique, and is accompanied on its inner side by a black line, the latter emitting a black streak towards the exterior border; this streak joins an indistinct greenish band which is united to a large blackish gray costal spot; the latter has on its outer side two black dots and a black streak, which joins the third of the black and white submarginal dots; marginal lunules black and very small; ciliæ with blackish spots; orbicular and reniform spots and a mark behind them with whitish borders; orbicular transverse, not oblique. Hind wings whitish, iridescent,

slightly hyaline, with broad brownish borders. Length of the body 10 lines; of the wings 22 lines.

a. Jamaica. In Mr. Saunders' collection.

Genus 26. PSAPHARA.

Mas. Corpus sat gracile. Proboscis mediocriter longa. Palpi validi, pilosi, subascendentes, caput superantes; articulus 3us conicus, parvus. Antennæ pectinatæ. Abdomen alas posticas triente superans. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus longis. Alæ sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subdenticulato sat obliquo.

Male. Body rather slender. Proboscis moderately long. Palpi stout, pilose, slightly ascending, extending beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ moderately pectinated. Abdomen extending about one-third of its length beyond the hind wings. Legs rather long and slender; hind tibiæ with four long spurs. Wings rather narrow. Fore wings straight in front, rounded at the tips, rather oblique along the exterior border, which is slightly denticulated.

1. Psaphara interclusa.

Mas. *Cervina; thorax subfuscescens; alæ anticæ nitentes, lineis valde incompletis e guttis fuscis, linea submarginali pallidissime fusca diffusa indeterminata e strigis lanceolatis, lunulis marginalibus fuscis, orbiculari obsoleta, reniformi e litura fusca; posticæ pallidissime cinereæ, marginibus subcervinis, ciliis albidis.*

Male. Fawn-colour. Thorax slightly brownish. Abdomen very pale fawn-colour. Fore wings shining, with the transverse lines very incomplete, composed of brown dots; submarginal line very pale brown, very diffuse and indistinct, composed of lanceolate streaks; marginal lunules brown; orbicular spot obsolete; reniform distinguished by a brown mark. Hind wings very pale cinereous, slightly fawn-coloured about the borders; ciliæ whitish. Length of the body 8 lines; of the wings 16 lines.

a. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.

Genus 27. STIBÆRA.

Mas. Corpus sat gracile. Proboscis mediocriter longa. Palpi subarcuati, vix ascendentes, caput perpaullo superantes; articulus 3us conicus, minimus. Antennæ nudæ, corporis dimidio non longiores. Abdomen longum, vix cristatum, alas posticas triente superans. Pedes vix robusti; tibiæ posticæ calcaribus longis. Alæ longiusculæ, mediocriter latæ; anticæ apud costam vix convexæ, apice acutæ, margine exteriore subdenticulato vix obliquo.

Male. Body rather slender. Proboscis moderately long. Palpi very slightly curved, hardly ascending, extending very little beyond the head; third joint conical, not more than one-sixth of the length of the second. Antennæ bare, hardly half the length of the body. Abdomen long, hardly crested, extending for one-third of its length beyond the hind wings. Legs hardly stout; hind tibiæ with four long spurs. Wings moderately broad, rather long. Fore wings hardly convex in front, acute at the tips, slightly denticulated, and hardly oblique along the exterior border.

1. Stibæra costiplaga.

Mas. *Pallide flavo-viridis; caput et thorax anticus fusca; abdomen cinereum, apice testaceum; alæ anticæ plagis tribus costalibus fuscis albo marginatis, lineis solitis maculisque subobsoletis, lineis duabus guttularibus maculisque duabus exterioribus fuscis; posticæ cinereæ, ciliis albidis.*

Male. Pale yellowish green. Head and fore part of the thorax brown. Abdomen cinereous, testaceous at the tip. Fore wings with three brown white-bordered patches along the costa, the largest at the base, the smallest in the middle; lines and discal spots almost obsolete; two exterior rows of brown dots, the inner one opposite the third patch, and accompanied by two brown spots on its outer side. Hind wings cinereous, with whitish ciliæ. Length of the body 9 lines; of the wings 22 lines.

a. Brazil. From Mr. Stevens' collection.

Genus 28. ELYMIOTIS.

Mas. Corpus sat validum. Proboscis longiuscula. Palpi validi, ascendentes, pilosissimi; articulus 3us minimus. Antennæ serratæ. Abdomen elongatum, cristatum, alas posticas triente superans. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus longissimis. Alæ sat amplæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriore denticulato mediocriter obliquo.

Male. Body moderately stout. Proboscis rather long. Palpi stout, ascending, very pilose; third joint very minute. Antennæ serrated. Abdomen elongated, crested, extending for one-third of its length beyond the hind wings. Legs rather long and slender; hind tibiæ with very long spurs. Wings rather ample. Fore wings quite straight in front, somewhat rounded at the tips, denticulated and moderately oblique along the exterior border.

1. Elymiotis Notodontoides.

Mas. *Cana, ex parte subfuscescens; caput et thorax anticus obscure fusca; abdomen pallide fuscescens, apice nigricans; alæ anticæ lineis nigris undulatis duplicatis incompletis, ex parte nigro conspersæ, strigis duabus exterioribus nigris, linea submarginali albida, lunulis submarginalibus et marginalibus venisque intermediis nigris, orbiculari et reniformi indistinctis, ciliis testaceis aut fuscis testaceo guttatis; posticæ sordide albidæ, fascia margineque lato diffuso fuscis.*

Male. Hoary, partly and slightly tinged with pale ligneous brown. Head and fore part of the thorax dark brown. Abdomen pale brownish, blackish at the tip. Fore wings with the usual lines black, undulating, double, and very incomplete; a few black flecks at the base, and before the middle and beyond the reniform spot, where they are accompanied by two black streaks; submarginal line whitish, indistinct, having between it and the black marginal lunules a row of black curves, the latter being connected with the lunules by the black intermediate veins; discal spots indistinct; ciliæ alternately brown and testaceous, each brown part including a testaceous dot opposite the black vein. Hind wings dingy whitish, with a slight brown band and a broad diffuse brown border. Length of the body 11 lines; of the wings 24 lines.

a ——? From M. Becker's collection.

Fam. 9. XYLINIDÆ.

Magnitudo varia. Corpus elongatum, sæpissime robustum. Proboscis mediocriter longa, nonnunquam brevis. Palpi mediocres, porrecti aut ascendentes, caput paullo superantes; articulus 3us minimus aut subelongatus. Antennæ sæpissime simplices. Prothorax elevatus. Abdomen alas posticas sæpe dimidio superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ anticæ lineatæ et strigatæ, sæpissime longæ angustæ lignicolores.

Xylinidæ, *Guen. Noct.* ii. 107.
Xylinidi, *Guen. Ann. Soc. Ent. Fr.* vi. 227; viii. 500.

Size various. Body elongated, most often stout. Proboscis moderately long, occasionally short. Palpi of moderate length, porrect or ascending, not extending much beyond the head; third joint very short, sometimes of moderate length. Antennæ very generally simple. Prothorax elevated. Abdomen generally extending far beyond the hind wings. Legs stout; tibiæ with long spurs. Fore wings with lines and streaks, generally long and narrow, and of a wood-colour.

A. Alæ maculis nullis vitreis.
  A. Alæ anticæ non argenteæ.
    A. Alæ anticæ non elongatæ.
      a. Antennæ *maris* subpectinatæ. - 1. LITHOCAMPA, *Guen.*
      b. Antennæ *maris* subserratæ. - 3. CLOANTHA, *Boisd.*
      c. Antennæ *maris* simplices.
        i. Proboscis mediocriter longa.
          * Palpi porrecti. - - 4. AUCHMIS, *Hübn.*
          ** Palpi suberecti. - 19. CALOPHASIA, *Steph.*
        ii. Proboscis longiuscula. - - 17. OMIA, *Hübn.*
        iii. Proboscis brevis.
          * Palporum articulus 3us minimus.
            † Corpus robustum. - 2. XYLOCAMPA, *Guen.*
            †† Corpus gracile. - 15. CRAMBODES, *Guen.*
          ** Palporum articulus 3us 2i triente non brevior.
            † Corpus robustum.
              ‡ Alæ anticæ apice rotundatæ.
                9. XYLINA, *Ochs.*
              ‡‡ Alæ anticæ apice angulatæ.
                18. CLEOPHANA, *Boisd.*
            †† Corpus gracile. - 16. EPIMECIA, *Guen.*

B. Alæ anticæ elongatæ.
a. Alæ anticæ apice rotundatæ.
i. Palporum articulus 3us 2i triente non brevior.
* Proboscis longiuscula. - 5. LITHOMIA, *Curt.*
** Proboscis breviuscula. - 8. RHUDA, *Walk.*
ii. Palporum articulus 3us brevissimus.
6. CALOCAMPA, *Steph.*
b. Alæ anticæ apice subangulatæ. - 7. CAPUSA, *Walk.*
c. Alæ anticæ apice acutæ.
i. Caput fasciculatum. - 12. NYSTALEA, *Guen.*
ii. Caput non fasciculatum.
* Alæ anticæ margine exteriore subobliquo.
11. CYRRHESTA, *Walk.*
** Alæ anticæ margine exteriore perobliquo.
† Alæ posticæ integræ. 13. CUCULLIA, *Ochs.*
†† Alæ posticæ subdenticulatæ.
10. LYNCESTIS, *Walk.*
B. Alæ anticæ argenteæ. - - 14. ARGYRITIS, *Hübn.*
B. Alæ maculis vitreis. - - - - 20. SIGA, *Hübn.*

Genus 1. LITHOCAMPA.

Corpus vix robustum. Caput antice fasciculatum. Proboscis brevis. Palpi porrecti, caput sat superantes; articulus 3us minimus. Antennæ corporis dimidio multo longiores. Abdomen cristatum, alas posticas vix superans. Pedes sat graciles; tibiæ posticæ calcaribus longis. Alæ anticæ angustæ, apud costam rectæ, apice acutæ, margine exteriore integro subconvexo valde obliquo. *Mas.*—Antennæ subpectinatæ.

Lithocampa, *Guen. Noct.* ii. 108.
Cleophana, p., *Treit.*
Xylocampa, p., *Boisd; Dup.; Herr.-Schæff.*
Calliergis, p., *Hübn. Verz. Schmett.* 244.

Body hardly stout. Frontal tuft conspicuous. Proboscis short. Palpi porrect, extending some distance beyond the head; third joint very minute. Antennæ much more than half the length of the body. Abdomen crested, hardly extending beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Fore wings narrow, straight in front, acute at the tips, entire, slightly convex and very oblique along the exterior border. *Male.*—Antennæ slightly pectinated.

1. Lithocampa ramosa.

Canescens; caput nigro fasciatum; thorax fuscus, antice albidis nigroque fasciatus; abdomen nigro cristatum; alæ anticæ lituris costalibus et discalibus strigisque lanceolatis exterioribus nigris, linea submarginali albida valde angulosa, vitta postica excisa fusca lineas nigras includente; posticæ albæ, gutta discali margineque fuscescentibus.

——— ———, *Engr. Pap. d'Eur.* 384, a—c.

Bombyx ramosa, *Esp. Schmett.* iii. 391, pl. 88, f. 3. *Hübn. Eur. Schmett. Noct.* pl. 51, f. 247. *Dup. Hist. Nat. Lép. Fr.* vii. 218, pl. 114, f. 5. *Freyer, Neue Beitr.* pl. 245, 72; *Ent. Zeit. Stett.* ii. 107.

Calliergis ramosa, *Hübn. Verz. Schmett.* 244, 2427.

Cleophana ramosa, *Treit. Schmett.* v. 64, 25; *Suppl.* 119.

Xylina ramosa, *Meig. Syst. Besch.* iii. 188, 15, pl. 110, f. 10.

Xylocampa ramosa, *Boisd. Ind. Méth.* 150, 1208. *Herr.-Schæff. Eur. Schmett.* ii. 290, 338.

Lithocampa ramosa, *Guen. Noct.* ii. 109, 826.

France. Switzerland. Germany.

a. Europe. From M. Becker's collection.
b. ———?

Genus 2. XYLOCAMPA.

Corpus robustum, pilosum. Proboscis brevis. Palpi porrecti, caput sat superantes; articulus 3us minimus. Antennæ corporis dimidio longiores. Abdomen cristatum, alas posticas paullo superans. Pedes sat validi; tibiæ posticæ calcaribus longis. Alæ anticæ sat angustæ, apud costam rectæ, apice subrotundatæ, margine exteriore subconvexo vix denticulato mediocriter obliquo. *Mas.*—Antennæ validæ, simplices.

Xylocampa, *Guen. Ann. Soc. Ent. Fr.* vi. 227; *Noct.* ii. 110; *Boisd.*; *Dup.*
Xylina, p., *Ochs.*
Dichonia, p., *Hübn. Verz. Schmett.* 217.
Cleophana, p., *Treit.*
Hadena, p., *Steph.*

Body stout, pilose. Proboscis short. Palpi porrect, extending some distance beyond the head; third joint very minute. Antennæ more than half the length of the body. Abdomen crested, extend-

ing a little beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Fore wings rather narrow, straight in front, slightly rounded at the tips, hardly denticulated, slightly convex and moderately oblique along the exterior border. *Male.*—Antennæ stout, simple.

1. XYLOCAMPA LITHORIZA.

Cinerascens; caput, thorax et alæ anticæ nigro conspersa; alæ anticæ roseo subtinctæ, lineis transversis undulosis, guttis costalibus, lunulis marginalibus annulisque duobus discalibus nigris, linea transversa submarginali angulosa albida; posticæ albidæ, fusco late marginatæ, ciliis albis.

——— ———, *Engr. Pap. d'Eur.* 290, a, b.
Noctua lithoriza, *Bork. Eur. Schmett.* iv. 339, 140. *Dup. Hist. Nat. Lép. Fr.* vii. 191, pl. 112, f. 4. *Frey. Beitr.* pl. 70.
Noctua areola, *Esp. Schmett.* iv. pl. 141, f. 4.
Noctua operosa, *Hübn. Eur. Schmett. Noct.* pl. 85, f. 398.
Cleophana lithorhiza, *Treit. Schmett.* v. 66, 26.
Xylina lithorhiza, *Meig. Syst. Besch.* iii. 184, 7, pl. 110, f. 8.
Dichonia operosa, *Hübn. Verz. Schmett.* 217, 2169.
Hadena lithorhiza, *Steph. Ill. Brit. Ent. Haust.* ii. 187.
Xylocampa lithorhiza, *Boisd. Ind. Méth.* 150, 1207. *Guen. Noct.* ii. 110, 827.
Xylophasia lithorhiza, *Herr.-Schæff. Eur. Schmett.* ii. 289, 335.

a—q. England. From Mr. Stephens' collection.
r—w. England.
æ, y. Europe. From M. Becker's collection.

Genus 3. CLOANTHA.

Corpus sat validum. Proboscis mediocriter longa. Palpi oblique ascendentes, caput paullo superans; articulus 3us cylindricus, 2i quadrante non longior. Antennæ filiformes, corporis dimidio longiores. Abdomen cristatum, alas posticas vix superans. Pedes sat graciles; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter latæ, apud costam rectæ, apice rotundatæ, margine exteriore subobliquo fere recto. *Mas.*—Antennæ subserratæ, subciliatæ.

Cloantha, *Boisd.; Guen. Ann. Soc. Ent. Fr.* viii. 509; *Noct.* ii. 111.
Actinotia, p., *Hübn. Verz. Schmett.* 244.
Xylina, p., *Treits.*

Body moderately stout. Proboscis moderately long. Palpi obliquely ascending, extending a little beyond the head; third joint cylindrical, about one-fourth of the length of the second. Antennæ filiform, more than half the length of the body. Abdomen crested, hardly extending beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Fore wings moderately broad, straight in front, rounded at the tips, nearly straight and slightly oblique along the exterior border. *Male.*—Antennæ very minutely serrated and ciliated.

1. Cloantha radiosa.

Cinereo-fusca; alæ anticæ fuscæ, basi canescentes, ocellis duobus elongatis obliquis discalibus strigisque submarginalibus lanceolatis lineisque ciliaribus albidis; posticæ albidæ, maculis discalibus margineque latissimo fuscis, ciliis albidis.

Noctua radiosa, *Esp. Schmett.* iv. pl. 195, f. 3. *Dup. Hist. Nat. Lép. Fr.* vii. 234, pl. 115, f. 1. *Frey. Beitr.* iii. pl. 238.
Noctua lyncea, *Hübn. Eur. Schmett. Noct.* pl. 92, f. 434.
Actinotia lyncea, *Hübn. Verz. Schmett.* 244, 2432.
Xylina radiosa, *Treit. Schmett.* v. 73, 30. *Meig. Syst. Besch.* iii. 192, 22, pl. 111, f. 5.
Cloantha radiosa, *Boisd. Ind. Méth.* 151, 1211. *Guen. Noct.* ii. 112, 828.

Hungary.

Genus 4. AUCHMIS.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti; articulus 3us conicus, minimus. Antennæ corporis dimidio longiores. Abdomen cristatum, alas posticas perpaullo superans. Pedes mediocriter validi; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter latæ, apud costam rectæ, apice perpaullo rotundatæ, margine plus minusve obliquo et denticulato. *Mas.*—Antennæ subciliatæ.

Cloantha, p., *Boisd.; Guen.; Herr.-Schæff.*
Xylina, p., *Treit.; Meig.*
Xylophasia, p., *Herr.-Schæff.*
Auchmis, p., et Actinotia, p., *Hübn. Verz. Schmett.* 243, 244.

Body stout. Proboscis moderately long. Palpi porrect; third joint conical, not one-fourth of the length of the second. Antennæ more than half the length of the body. Abdomen crested,

extending very little beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Fore wings moderately broad, straight in front, very slightly rounded at the tips, somewhat or very oblique, and more or less denticulated along the exterior border. *Male.*—Antennæ very minutely ciliated.

1. Auchmis Hyperici.

Cinerea; thorax fascia antica tenui angulata nigra; alæ anticæ ex parte cinereo-fuscæ, ocellis duabus vittisque discalibus strigisque exterioribus canis nigro marginatis; posticæ nigro-cinereæ, basi pallidiores.

——— ———, *Engr. Pap. d'Eur.* 357, a.

Noctua Hyperici, *Wien. Verz.* 76, 10. *Fabr. Mant. Ins.* ii. 167, 217; *Ent. Syst.* iii. 2, 91, 272. *Bork. Eur. Schmett.* iv. 351, 146. *Hübn. Eur. Schmett. Noct.* pl. 51, f. 250. *Dup. Hist. Nat. Lép. Fr.* vii. 194, pl. 112, f. 5. *Frey. Beitr.* ii. pl. 154.

Phalæna-Noctua Hypericonis, *Gmel. ed. Syst. Nat.* i. 5, 2577, 1180.

Xylina Hyperici, *Treit. Schmett.* v. 67, 27. *Meig. Syst. Besch.* iii. 190, 19, pl. 111, f. 3.

Cloantha Hyperici, *Boisd. Ind.* 151, 1209. *Guen. Noct.* ii. 113, 829.

Xylophasia Hyperici, *Herr.-Schæff. Eur. Schmett.* ii. 289, 334.

Auchmis Hyperici, *Hübn. Verz. Schmett.* 243, 2424.

a—c. Europe. From M. Becker's collection.

2. Auchmis perspicillaris.

Pallide cinerascens; thoracis vittæ duæ abdominisque vitta dorsalis fuscescentes; alæ anticæ plaga discali nigro-fusca ocellum elongatum antice acuminatum includente, vittis basalibus strigisque lanceolatis marginalibus nigricantibus; posticæ pallide cinerascentes, margine lato fuscescente, venis obscurioribus.

——— ———, *Engr. Pap. d'Eur.* 345, a, d.

Phalæna-Noctua perspicillaris, *Linn. Syst. Nat.* 849, 148; *Faun. Suec.* 1198. *Gmel. ed. Syst. Nat.* i. 5, 2564, 148.

Phalæna polyodon, *Clerck, Icon.* pl. 2, f. 3.

Noctua perspicillaris, *Wien. Verz.* 76, 11. *Fabr. Mant. Ins.* ii. 167, 218; *Ent. Syst.* iii. 2, 92, 273. *Esp. Schmett.* iv. pl. 134, f. 3. *Brahm, Ins.* 152. *Bork. Eur. Schmett.* iv. 336, 139. *Hübn. Eur. Schmett. Noct.* pl. 51, f. 249. *Dup. Hist. Nat. Lép. Fr.* vii. 149, pl. 110, f. 2. *Frey. Alt. Beitr.* pl. 5, 20; *Ent. Zeit. Stett.* ii. 108.

Actinotia perspicillaris, *Hübn. Verz. Schmett.* 244, 2431.

Xylina perspicillaris, *Treit. Schmett.* v. 60, 28. *Meig. Handb.* 174, 68; *Syst. Besch.* iii. 190, 18, pl. 111, f. 1.

Cloantha perspicillaris, *Boisd. Ind. Meth.* 151, 1210. *Guen. Noct.* ii. 113, 830. *Herr.-Schæff. Eur. Schmett.* ii. 301, 367.

Europe.

a. England. From Mr. Stephens' collection.

North America.

3. Auchmis ramosula.

Cinerea; palpi breves; alæ anticæ carneo subtinctæ, lituris radiatis nigro-fuscis, reniformis dimidio postico nebula nigricante tecto, orbiculari annulari elongata indistincta, linea arcuata e denticulis aut punctis nigris; posticæ cinereæ, basi pallidiores, lunula venisque obscuris, subtus albæ lunula margineque carneo-cinereis.

Cloantha ramosula, *Guen. Noct.* ii. 114, 831.

North America.

Australia.

4. Auchmis composita.

Var. *Cana; thorax fusco fasciatus et vittatus; alæ anticæ vitta informi interrupta extus divisa, margine interiore lineaque exteriore angulosa fuscis, linea basali, venis exterioribus guttisque marginalibus nigris, lituraque discali alba; posticæ fuscescente-cinereæ, ciliis albis.*

Cloantha composita, *Guen. Noct.* ii. 114, 832.

Hoary. Thorax with brown bands and stripes. Fore wings brown along the interior border, with a brown irregular discal stripe, which is interrupted and divided exteriorly, with a black basal line with black exterior veins, with marginal black dots, with a white discal figure, and with an exterior zigzag transverse brown line; disk beneath brown. Hind wings brownish cinereous, with white [illegible] Length of the body 6 lines; of the wings 14 lines.

a. Tasmania. Presented by the Rev. A. Beaufort.
b, c. Tasmania. Presented by Morton Allport, Esq.
d, e. Adelaide. Presented by the Entomological Club.
f. New Zealand. Presented by the Rev. W. Colenso.
g—i. New Zealand. Presented by Dr. Sinclair.
j, k. New Zealand. Presented by Col. Bolton.
l. New Zealand. From Mr. Churton's collection.
m. Tasmania. From Mr. A. J. Smith's collection
n. ———? From the voyage of H.M.S. Herald.

Genus 5. LITHOMIA.

Corpus robustum. Proboscis longiuscula. Palpi breves, graciles, caput vix superantes; articulus 3us 2i triente æqualis. Antennæ graciles, corporis dimidio longiores. Abdomen alas posticas triente superans, non cristatum. Pedes validi; tibiæ posticæ calcaribus longis. Alæ anticæ longiusculæ, sat angustæ, apice rotundatæ, margine exteriore perobliquo vix angulato. *Mas.*—Antennæ subciliatæ.

Lithomia, *Curt. Brit. Ent.*
Lithomoia, p., *Hübn. Verz. Schmett.* 244.
Xylina, p., *Treit.; Meig.; Herr.-Schæff.*
Cloantha, p., *Boisd.; Guen.*

Body stout. Proboscis rather long. Palpi short, slender, hardly extending beyond the head; third joint cylindrical, about one-third of the length of the second. Antennæ slender, more than half the length of the body. Abdomen extending for one-third of its length beyond the hind wings, not crested. Legs stout; hind tibiæ with four long spurs. Fore wings rather long and narrow, straight in front, rounded at the tips, very slightly angular and very oblique along the exterior border. *Male.*—Antennæ very minutely ciliated.

1. Lithomia Solidaginis.

Cinereo-canescens; thorax nigro-fusco fasciatus; abdomen cinerascens; alæ anticæ canescentes, costa fasciisque diffusis fuscescentibus, venis strigisque lanceolatis exterioribus nigris, linea submarginali valde angulosa, orbiculari et reniformi albido marginatis, hac magna disco albo, illa parva subrotunda; posticæ cinerascentes, ciliis albis.

Noctua Solidaginis, *Hübn. Eur. Schmett. Noct.* pl. 53, f. 256. *Dup. Hist. Nat. Lép. Fr.* vii. 179, pl. 112, f. 1.
Lithomoia Solidaginis, *Hübn. Verz. Schmett.* 244, 2426.
Lithomia Solidaginis, *Curt. Brit. Ent.* pl. 683.
Cucullia Solidaginis, *Steph. Ill. Brit. Ent. Haust.* iv. 390. *Trans. Ent. Soc. Lond.* ii. 57, pl. 3, f. 7.
Xylina Solidaginis, *Treit. Schmett.* v. 11, 3. *Meig. Syst. Besch.* iii. 181, 3, pl. 109, f. 11. *Herr.-Schæff. Schmett. Eur.* ii. 302, 368. *Boisd. Ind. Méth.* 149, 1199.
Cloantha Solidaginis, *Guen. Noct.* ii. 115, 833.

a, *b*. England. Presented by — Labrey, Esq.
c—*j*. England. From Mr. Stephens' collection.
k, *l*. England.
m—*p*. Europe. From M. Becker's collection.
q, *r*. Europe.

Asia.

2. Lithomia? Ruta.

Mas. *Alæ anticæ cinereo-fuscæ, maculis ordinariis nigricantibus nigro circumscriptis, lineisque duabus transversis denticulatis nigris; posticæ basi subcinereæ, externe nigricantes.*

Xylina Ruta, *Eversmann, Bull. Soc. Imp. Nat. Mosc.* 1851, xxiv. No. 2, 634, 21.

Eastern Siberia.

Genus 6. CALOCAMPA.

Corpus robustum. Proboscis mediocriter longa. Palpi brevissimi, caput non superantes; articulus 3us minimus. Antennæ validæ, subciliatæ, corporis dimidio paullo longiores. Abdomen alas posticas triente superans, non cristatum. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ anticæ longæ, angustæ, apud costam rectæ, apice rotundatæ, margine exteriore subdenticulato valde obliquo.

Calocampa, *Steph.; Curt.; Guen. Ann. Soc. Ent. Fr.* viii. 505; *Noct.* ii. 115.
Axylia, p., *Hübn. Verz. Schmett.* 242.
Xylina, p., *Ochs.; Treits.; Meig.; Boisd.*

Body stout. Proboscis moderately long. Palpi very short, not extending beyond the head; third joint very minute. Antennæ stout, very minutely ciliated, a little more than half the length of

the body. Abdomen extending for about one-third of its length beyond the hind wings, not crested. Legs stout; hind tibiæ with four long spurs. Fore wings long and narrow, straight in front, rounded at the tips, straight, slightly denticulated and very oblique along the exterior border.

1. Calocampa vetusta.

Cervina; thorax nigro-cinereus, antice cervinus, lineis undulatis nigris pallidisque; alæ anticæ disco ex parte albido punctis nigris, vitta brevi lata postica fusca, orbiculari subobsoleta, reniformi nigro albidoque signata, striga exteriore guttisque elongatis submarginalibus nigris, linea angulosa submarginali testacea; posticæ pallide cervinæ, ciliis albidis.

———, *Engr. Pap. d'Eur.* 370, b—d, e. *Wilk. Pap.* 18. *Roës. Ins.* i. pl. 24, f. 2 (larv.).

Noctua vetusta, *Hübn. Eur. Schmett. Noct.* pl. 97, f. 459. *Dup. Hist. Nat. Lép. Fr.* vii. 159, pl. 111, f. 1.

Xylina vetusta, *Treit. Schmett.* v. 3, 4, 1. *Meig. Handb.* 173, 67; *Syst. Besch.* iii. 181, 2, pl. 109, f. 10. *Boisd. Ind. Méth.* 149, 1197. *Herr.-Schæff. Eur. Schmett.* ii. 303, 370.

Axylia vetusta, *Hübn. Verz. Schmett.* 242, 2406.

Calocampa vetusta, *Steph. Ill. Brit. Ent. Haust.* ii. 174. *Guen. Noct.* ii. 115, 834.

Noctua exoleta, *Panz. Faun. Germ.* 61, 23.

a—f. England. From Mr. Stephens' collection.
g, h. England. From Mr. Stevens' collection.
i, j. England.
k—n. Scotland. From Mr. Foxcroft's collection.
o. Europe. From M. Becker's collection.
p, q. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.
r. Massachusetts. From Prof. Sheppard's collection.
s. Orilla, West Canada. From Mr. Bush's collection.

2. Calocampa exoleta.

Cervina; caput antice nigro-fuscum; thorax nigro-cinereus, antice cervinus linea valde undulata nigra; alæ anticæ nigro subconspersæ, postice fuscescentes, linea discali alba, costa vittaque dislocata nigris, orbiculari subobsoleta, reniformi nigro signata, linea submarginali angulosa testacea, posticæ cervino-cinereæ, ciliis pallidioribus.

——— ———, *Roës. Ins.* i. pl. 24, f. 2—5. *Deg. Ins.* ii. 401, pl. 7. *Naturf.* 29, 220. *Wilk. Pap.* 8, 1, 2, pl. 18. *Engr. Pap. d'Eur.* 370, a, e—h. *Frisch, Ins.* v. pl. 11, f. 1. *Sulz. Ins.* pl. 16, f. 95. *Schæff. Icon.* pl. 24, f. 6, 7.

Phalæna-Noctua exoleta, *Linn. Syst. Nat.* 849, 151; *Faun. Suec.* 1085. *Gmel. ed. Syst. Nat.* i. 5, 2565, 151.

Noctua exoleta, *Wien. Verz.* 75, 1. *Fabr. Sp. Ins.* ii. 239, 144; *Mant. Ins.* ii. 180, 290; *Ent. Syst.* iii. 2, 119, 361. *Esp. Schmett.* iv. pl. 138, f. 1—3. *Bork. Eur. Schmett.* iv. 319, 134. *Hübn. Eur. Schmett. Noct.* pl. 50, f. 244. *Dup. Hist. Nat. Lép. Fr.* vii. 143, pl. 111, f. 2. *Donov. Brit. Ins.* v. pl. 187. *Haw Lep. Brit.* 24.

Xylina exoleta, *Treit. Schmett.* v. 3, 7, 2. *Meig. Handb.* 173, 66: *Syst. Besch.* iii. 180, 1, pl. 109, f. 9. *Herr.-Schæff. Schmett. Eur.* ii. 303, 370.

Axylia exoleta, *Hübn. Verz. Schmett.* 242, 2405.

Calocampa exoleta, *Steph. Ill. Brit. Ent. Haust.* ii. 173. *Curt. Brit. Ent.* pl. 256. *Boisd. Ind. Méth.* 149, 1198. *Guen. Noct.* ii. 116, 835.

a—i. England. From Mr. Stephens' collection.
j—m. England.
n, o. Scotland. From Mr. Foxcroft's collection.
p, q. Europe. From M. Becker's collection.
r. Europe.

Genus 7. CAPUSA.

Fœm. Corpus robustum. Proboscis brevis. Palpi breves, porrecti, caput non superantes; articulus 3us longi-conicus, 2i dimidio æqualis. Antennæ simplices, graciles, corporis dimidio multo longiores. Abdomen alas posticas vix superans. Pedes vix validi; tibiæ posticæ calcaribus breviusculis. Alæ anticæ longæ, angustæ, apud costam subrectæ, apice subangulatæ, margine exteriore perobliquo.

Female. Body stout. Proboscis short. Palpi short, porrect, not extending beyond the head; third joint elongate-conical, about half the length of the second. Antennæ simple, slender, much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs hardly stout; hind tibiæ with rather short spurs. Fore wings long and narrow, almost straight in front, slightly angular at the tips, very oblique along the exterior border.

1. Capusa senilis.

Fœm. *Cinerea, ex parte cana; abdomen canum; alæ anticæ fasciis duabus canis angulosis indistinctis et incompletis, vitta alba, orbiculari et reniformi e lituris duabus indeterminatis nigricantibus; posticæ albæ, apice nigræ.*

Female. Cinereous, partly hoary. Abdomen hoary. Fore wings with two indistinct and incomplete angulose gray bands, and with a white stripe; orbicular and reniform spots distinguished by two indefinite blackish marks. Hind wings white, black at the tips, and more slightly so along the exterior border. Length of the body 9 lines; of the wings 24 lines.

a. Tasmania. Presented by R. Butler, Esq.

Genus 8. RHUDA.

Corpus robustum. Proboscis breviuscula. Palpi porrecti, caput superantes; articulus 3us cylindricus, 2i triente æqualis. Antennæ subciliatæ, corporis dimidio non breviores. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ longiusculæ, sat angustæ, apud costam rectæ, apice rotundatæ, margine exteriore subconvexo perobliquo.

Body stout. Proboscis rather short. Palpi porrect, extending somewhat beyond the head; third joint cylindrical, about one-third of the length of the second. Antennæ slightly ciliated, full half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. Legs stout; hind tibiæ with long spurs. Wings rather long and narrow, straight in front, rounded at the tips, slightly convex and very oblique along the exterior border.

1. Rhuda basifera.

Fœm. *Olivaceo-viridis; thorax fasciis incompletis albidis; abdomen fusco-cinereum, basi luteum; alæ anticæ roseo-albidæ, vittis duabus æneo-fuscis, antica angulosa nigro strigata et marginata, strigis lineaque undulata submarginalibus nigris, ciliis fuscis basi albo guttatis; posticæ luteæ, margine latissimo æneo-fusco, ciliis albido-luteis.*

Female. Olive-green. Thorax with incomplete whitish bands. Abdomen brownish cinereous, luteous at the base. Fore wings whitish with a rosy tinge, with some black streaks near the exterior

border, and with a black undulating submarginal line; two æneous-brown stripes, the fore one angulose, streaked and bordered with black, more distinct than the hind one; ciliæ brown, with a row of white dots at the base. Hind wings luteous, with very broad æneous-brown borders, and with whitish luteous ciliæ. Length of the body 10 lines; of the wings 23 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

Genus 9. XYLINA.

Corpus robustum. Caput antice fasciculatum. Proboscis brevis. Palpi porrecti, pilosi, caput paullo superantes; articulus 3us cylindricus, 2i triente æqualis. Antennæ validæ, corporis dimidio multo longiores. Abdomen latum, basi cristatum, alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter latæ aut sat angustæ, apud costam rectæ, apice rotundatæ, margine exteriore subconvexo subdenticulato, mediocriter aut valde obliquo. *Mas.*—Antennæ subciliatæ.

Xylina, p., *Ochs.; Treit.; Dup.; Boisd.; Steph.; Guen. Ann. Soc. Ent. Fr.* viii. 503; *Noct.* ii. 117.
Graptolitha, p., et Lithophane, p., *Hübn. Verz. Schmett.*

Body stout. Frontal tuft conspicuous. Proboscis short. Palpi porrect, pilose, extending a little beyond the head; third joint cylindrical, about one-third of the length of the second. Antennæ stout; much more than half the length of the body. Abdomen broad, extending a little beyond the hind wings, crested near the base. Legs stout; hind tibiæ with four long spurs. Fore wings moderately broad, straight in front, rounded at the tips, slightly convex and denticulated, and moderately oblique along the exterior border. *Male.*—Antennæ minutely ciliated.

A. Alæ anticæ non fusco variæ.
  A. Alæ posticæ fusco-rufescentes. - - Merckii, *Ramb.*
  B. Alæ posticæ cervinæ. - - - Zinckenii, *Treit.*
  C. Alæ posticæ pallidæ.
    A. Alæ anticæ plaga alba. - - - cinerosa, *Guen.*
    B. Alæ anticæ plaga nulla alba. - rhizolitha, *Wien. Verz.*
B. Alæ anticæ fusco variæ.
  A. Alæ anticæ non angustæ. - - conformis, *Wien. Verz.*
  B. Alæ anticæ angustæ. - - - - lapidea, *Hübn.*
C. Alæ anticæ dimidio basali fusco. - Ingrica, *Herr.-Schæff.*
D. Alæ anticæ cervinæ. - - - petrificata, *Wien. Verz.*
E. Alæ anticæ fuscæ. - - - - semibrunnea, *Haw.*

1. Xylina Merckii.

Alæ anticæ supra subcinereæ, venis lineisque nigris; posticæ fusco-rufescentes; crista dorsali ad apicem rufa; abdomen fusco-rufescens.

Xylina Merckii, *Ramb. Ann. Soc. Ent. Fr.* i. 293, pl. 9, f. 6. *Boisd. Ind. Méth.* 149, 1200. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 423, pl. 37, f. 4. *Guen. Noct.* ii. 117, 836. *Herr.-Schæff. Eur. Schmett.* ii. 304, 375.

Noctua Ripagina, *Geyer. Schmett.* f. 840.

Noctua simplex, *Frey. Beit.* iii. pl. 255, f. 1.

South France. Corsica. Hungary.

a. Europe. From M. Becker's collection.

2. Xylina conformis.

Cinerea; antennæ basi albæ; abdomen subcervinum; alæ anticæ linea basali lineaque discali posteriore nigris hac intus furcata, striga basali strigaque obliqua inter maculas fuscis, maculis magnis ex parte nigro marginatis, linea submarginali cana undulata ex parte fusco notata; posticæ subcervinæ, ciliis albidis.

——— ———, *Engr. Pap. d'Eur.* 343, a—c. *Deg. Ins.* ii. 436, pl. 8.

Noctua conformis, *Wien. Verz.* 76, 7. *Fabr. Mant. Ins.* ii. 183, 302; *Ent. Syst.* iii. 2, 124, 374. *Bork. Eur. Schmett.* iv. 348, 145. *Hübn. Eur. Schmett. Noct.* pl. 50, f. 243. *Dup. Hist. Nat. Lép. Fr.* vii. 182, pl. 112, f. 2.

Phalæna-Noctua conformis, *Gmel. ed. Syst. Nat.* i. 5, 2566, 1137.

Noctua furcifera, *Naturf.* ix. 77.

Noctua bifurca, *Esp. Schmett.* iv. pl. 131, f. 1.

Xylina conformis, *Treit. Schmett.* v. 3, 12, 4. *Meig. Syst. Besch.* iii. 182, 4, pl. 109, f. 12. *Boisd. Ind. Méth.* 149, 1201. *Eversm. Faun. Volg.-Ural.* 287. *Guen. Noct.* ii. 118, 837. *Herr.-Schæff. Eur. Schmett.* ii. 305, 380.

Graptolitha conformis, *Hübn. Verz. Schmett.* 243, 2413.

a, *b*. Europe. From M. Becker's collection.

c. Europe.

3. Xylina cinerosa.

Cinerea, X. conformi *similis, minor; thorax lineis nigris magis distinctis; alæ anticæ latiores, albido-cinereæ, nebulis nigricantibus lineis maculisque bene determinatis, plaga antica basali alba; posticæ pallidiores.*

Xylina cinerosa, *Guen. Noct.* ii. 118, 838.
Xylina conformis, *var.?*

Swiss and French Alps.

4. Xylina Ingrica.

Cana; thoraæ fusco varius, fascia antica abdominisque margine testaceis, hujus vitta nigra; alæ anticæ dimidio basali ex parte fuscescentes, lineis transversis angulosis interruptis albis nigro marginatis, maculis albo nigroque marginatis, guttis marginalibus nigris; posticæ subtestaceæ, linea fasciaque cinereis, punctis marginalibus nigris.

Xylina Ingrica, *Herr.-Schæff. Eur. Schmett.* ii. 305, 379, pl. 99, f. 507. *Guen. Noct.* ii. 118, 839.

Russia.

5. Xylina Zinckenii.

Cinerea; caput et thorax nigro fasciata; abdomen cervinum; alæ anticæ albido variæ, vitta bis interrupta, fascia incompleta angulosa exteriore liturisque discalibus nigris, macula discali ferruginea; posticæ cervinæ, ciliis albis.

Var. Xylina somniculosa, *Hering, Ent. Zeit. Stett.* ii. 167.
Xylina Zinckenii, *Treit. Schmett.* v. 16; *Suppl.* 109. *Boisd. Ind. Méth.* 149, 1202. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 367, pl. 34. *Guen. Noct.* ii. 119, 840. *Herr.-Schæff. Eur. Schmett.* ii. 305, 381, pl. 28, f. 135.
Noctua Lamda? *Fabr. Ent. Syst.* iii. 2, 106, 317, 317.
Noctua Zinckenii, *Frey. Beit.* i. pl. 63.

a. Europe. From M. Becker's collection.

6. Xylina rhizolitha.

Cana; caput antice nigro marginatum; thorax fascia antica alba nigro marginata; abdomen cinerascens; alæ anticæ linea basali, macularum marginibus ex parte, guttis exterioribus strigis obliquis costalibus punctisque marginalibus nigris; posticæ cinerascentes, ciliis albidis.

———— ————, *Engr. Pap. d'Eur.* 284, a—d.

Noctua rhizolitha, *Wien. Verz.* 75, 6. *Fabr. Mant. Ins.* ii. 182, 301; *Ent. Syst.* iii. 2, 124, 373. *Esp. Schmett.* iv. pl. 121, f. 6. *Bork. Eur. Schmett.* iv. 345, 144. *Hübn. Eur. Schmett. Noct.* pl. 50; f. 242. *Brahm, Ins.* 62. *Dup. Hist. Nat. Lép. Fr.* vii. 187, pl. 112, f. 3.

Phalæna-Noctua rhizolitha, *Gmel. ed. Syst. Nat.* i. 5, 2566, 1136.

Xylina rhizolitha, *Treit. Schmett.* v. 3, 21, 7. *Meig. Handb.* 174, 70; *Syst. Besch.* iii. 182, 5, pl. 110, f. 1. *Steph. Ill. Brit. Ent. Haust.* ii. 170. *Boisd. Ind. Méth.* 150, 1204. *Guen. Noct.* ii. 119, 841. *Herr.-Schæff. Eur. Schmett.* ii. 305, 378.

Graptolitha rhizolitha, *Hübn. Verz. Schmett.* 243, 2414.

Noctua Lambda, *Haw. Lep. Brit.* 61.

a—h. England. From Mr. Stephens' collection.
i, k. England.
l—n Europe. From M. Becker's collection.

7. Xylina lapidea.

Var. *Cana; abdomen cinerascens; alæ anticæ angustæ, fusco sublituratæ, linea discali dislocata macularum marginibus ex parte strigisque marginalibus nigris, margine exteriore valde obliquo; posticæ pallide testaceo-cinerascentes.*

Noctua lapidea, *Hübn. Eur. Schmett. Noct.* f. 382.

Graptolitha lapidea, *Hübn. Verz. Schmett.* 243, 2415.

Xylina lapidea, *Treit. Schmett.* v. 19. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 381, pl. 34, f. 1. *Boisd. Ind. Méth.* 150, 1203. *Guen. Noct.* ii. 119, 842. *Herr.-Schæff. Eur. Schmett.* ii. 303, 374.

Var. Xylina Leautieri, *Boisd. Ind. Méth. Suppl.* 6. *Treit. Suppl.* 110.

Var. Noctua Sabinæ, *Geyer, Schmett.* f. 766, 767.

Xylina Sabinæ, *Treit. Suppl.* 109.

a, b. Europe. From M. Becker's collection.
c. Europe. From Dr. Frivaldsky's collection.

8. Xylina semibrunnea.

Ligno-fusca; abdomen pallidum, crista nigricante; alæ anticæ lituris pallidioribus, strigis lanceolatis margineque postico nigro-fuscis; posticæ cinerascentes, margine obscuriore.

——— ———, *Engr. Pap. d'Eur.* 371, a, b.
Noctua semibrunnea, *Haw. Lep. Brit.* 30.
Xylina semibrunnea, *Steph. Ill. Brit. Ent. Haust.* ii. 170, pl. 21, f. 3. *Guen. Noct.* ii. 121, 843.
Noctua petrificata, *Dup. Hist. Nat. Lép. Fr.* vii. 213, pl. 113.
Xylina petrificata, *Dup. Suppl.* iii. 370, pl. 134.
Xylina oculata, *Germ. Faun. Ins.* ix. pl. 18. *Treit. Suppl.* 112. *Boisd. Ind. Méth.* 150, 1206. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 373, pl. 34, f. 4. *Herr.-Schæff. Eur. Schmett.* ii. 303, 373, pl. 89, f. 460.

a—g. England. From Mr. Stephens' collection.
h—j. England.

9. Xylina petrificata.

Cervina; caput et thorax fuscescentia; alæ anticæ angustæ lineis postice confusis, guttis submarginalibus strigisque marginalibus fuscis, maculis indistinctis, margine exteriore valde obliquo; posticæ cinerascentes.

——— ———, *Engr. Pap. d'Eur.* 371, c.
Noctua petrificata, *Wien. Verz.* 75, 3. *Fabr. Mant. Ins.* ii. 182, 300; *Ent. Syst.* iii. 2. *View.* 128, pl. 3, f. 4. *Bork. Eur. Schmett.* iv. 326, 135.
Phalæna-Noctua petrificata, *Gmel. ed. Syst. Nat.* i. 5, 2565, 1135.
Noctua petrificosa, *Hübn. Eur. Schmett. Noct.* pl. 49, f. 239.
Lithophane petrolignea, *Hübn. Verz. Schmett.* 242, 2408.
Xylina petrificata, *Treit. Schmett.* v. 3, 23, 8. *Meig. Syst. Besch.* iii. 183, 6, pl. 110, f. 5 *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 370, pl. 34. *Steph. Ill. Brit. Ent. Haust.* ii. 171, pl. 23, f. 1. *Boisd. Ind. Méth.* 150, 1205. *Guen. Noct.* ii. 121, 844. *Herr.-Schæff. Eur. Schmett.* ii. 303, 372.

a—f. England. From Mr. Stephens' collection.
g, h. England.
i. Europe. From M. Becker's collection.
j. Europe.

North America.

10. Xylina contraria.

Cinerea; thorax fascia antica vittisque duabus nigris; abdomen nigro cristatum; alæ anticæ annulis discalibus fasciisque duabus lanceolatus albidis nigro marginatis, striga nigra media ferrugineo marginata; posticæ pallide cinereæ, marginibus obscurioribus, ciliis albidis.

Cinereous. Thorax with a black band in front, and with a black stripe on each side. Abdomen with blackish crests. Fore wings with the discal ringlets and with two lanceolate bands (one interior, the other exterior) whitish with black borders; a black ferruginous-bordered streak between the bands, of which the exterior one is dilated where it joins the streak. Hind wings pale cinereous, with darker borders, and with whitish ciliæ. Length of the body 6 lines; of the wings 14 lines.

a. United States. Presented by E. Doubleday, Esq.
b. Orilla, West Canada. From Mr. Bush's collection.

11. Xylina infructuosa.

Mas. *Cinerea; thorax fuscescente subfasciatus; abdomen fasciculo apicali cervino; alæ anticæ fasciis duabus fuscis valde indistinctis, strigis nonnullis basalibus nigris et pallide cinereis; posticæ cinereæ, margine fuscescente.*

Male. Cinereous. Thorax slightly banded with brown. Abdomen with a tuft of fawn-coloured hairs at the tip. Fore wings with two very indistinct brown bands; some black and pale cinereous basal streaks; submarginal line angulose, black, bordered with pale cinereous. Hind wings cinereous, with brownish borders. Length of the body 7 lines; of the wings 15 lines.

a. East Florida. Presented by E. Doubleday, Esq.

12. Xylina signosa.

Mas. *Cinerea; thorax nigro conspersus, ex parte ferrugineus, fascia antica nigra; abdomen ferrugineo cristatum; alæ anticæ strigis ferrugineis; orbiculari et reniformi indistinctis pallido marginatis, linea duplici exteriore guttulari strigisque marginalibus nigris, striga postica latiore nigricante.*

Male. Cinereous. Thorax partly ferruginous, speckled with black, and with a black band in front. Abdomen with ferruginous crests. Fore wings with ferruginous streaks; orbicular and reniform spots indistinct, with pale borders; a double exterior line of black dots, and a marginal row of black streaks; a broader blackish streak near the middle of the interior border. Length of the body 6 lines; of the wings 16 lines.

a. Northern United States. Presented by E. Doubleday, Esq.

13. Xylina multifaria.

Fœm. *Fusca; caput et thorax anticus cinerea, nigro fasciata; abdomen nigro conspersum; tarsi nigro-cincti; alæ anticæ striga basali nigra, strigis discalibus nigricantibus, striga postica undulata nigricante, orbiculari obliqua longissima et reniformi contiguis cervinis, costa nigro guttata, linea submarginali e strigis lanceolatis cinereis; posticæ cinereæ, lituris discalibus margineque fuscis, lunulis marginalibus nigris.*

Female. Brown. Head and fore part of the thorax cinereous, each with a black band. Disk of the thorax partly cinereous. Abdomen speckled with black. Tarsi with black bands. Fore wings with a black basal streak, and with other less distinct blackish streaks in the disk; a whitish undulating streak behind the orbicular spot, which is oblique and very long, and is contiguous at its hinder end to the reniform; both fawn-coloured; costa with black dots; submarginal line cinereous, composed of lanceolate streaks. Hind wings cinereous, with a discal band of brown marks, and a broad brown border; marginal lunules black. Length of the body 5 lines; of the wings 15 lines.

a. United States. Presented by E. Doubleday, Esq.

South America.

14. Xylina infensa.

Fœm. *Fusca, cinereo varia; alæ anticæ strigis nigris, lineis transversis angulosis guttisque costalibus pallidis; posticæ albæ, fusco marginatæ.*

Female. Brown, varied with cinereous. Abdomen cinereous. Fore wings with black streaks, with pale angulose transverse lines, and with pale dots along the costa towards the tip. Hind wings

white, with brown borders. Length of the body 6 lines; of the wings 14 lines.

a. Venezuela. From Mr. Dyson's collection.

15. Xylina bipunctata.

Mas. *Cinerea; thorax fusco bifasciatus; abdomen guttis lateralibus nigricantibus; alæ anticæ nigro subconspersæ, strigis nonnullis diffusis pallide fuscis, guttis exterioribus et marginalibus duabusque discalibus nigris, striga postica interiore obscure fusca, ciliis fuscis cinereo strigatis; posticæ albæ, opalinæ, fusco vix marginatæ.*

Male. Cinereous. Thorax with two brown bands. Abdomen with some blackish dots along each side. Fore wings very minutely speckled with black, with some pale brown diffuse streaks, with black dots on the exterior veins, with black marginal dots, and with two black discal dots indicating the reniform spot; a dark brown streak near the base of the interior border; ciliæ brown, with cinereous streaks. Hind wings white, opaline, slightly bordered towards the tips with pale brown. Length of the body 6 lines; of the wings 14 lines.

Brazil. In Mr. Saunders' collection.

16. Xylina albula.

Mas et fœm. *Cana; thorax antice nigro fasciatus; abdomen albidum; alæ anticæ strigis discalibus liturisque obliquis costalibus pallide fuscescentibus, lineis duabus guttularibus nigris (una exteriore, altera marginali), orbiculari et reniformi e guttis paucis nigris; posticæ albæ, guttis marginalibus fuscis.*

Male and female. Hoary. Antennæ of the male minutely serrated. Thorax with a black band in front. Abdomen whitish, thickly tufted at the tip in the male. Fore wings with pale brownish streaks and oblique costal marks, with two lines of black dots, the one exterior, the other marginal, and with a black basal line; orbicular and reniform spots indicated by a few black dots. Hind wings white, iridescent, with brown marginal dots. Length of the body 5—6 lines; of the wings 12—14 lines.

a, b. St. Domingo. From Mr. Tweedie's collection.
c. Honduras. From Mr. Dyson's collection.
d. Honduras. Presented by E. Doubleday, Esq.

Africa.

17. Xylina Lefebvrei.

Alæ anticæ albidæ venis lineisque nigris, maculis duabus ordinariis nigro-cinctis, posticæ albæ; corpus albido-cinereum.

Xylina Lefebvrei, *Bugnion, Ann. Soc. Ent. Fr.* vii. 443, pl. 16, f. 4.

Egypt.

18. Xylina extricata.

Fœm. *Pallidissime cervina; thorax fascia antica nigra; abdomen albido-cervinum, subcristatum; basi album, apice obscurum; alæ anticæ strigis nonnullis costalibus obliquis fuscis, costa apicem versus cinerea pallido guttata, guttis paucis discalibus, linea duplicata marginali guttulari lineaque basali nigris, striga apud marginem interiorem fusca interrupta; posticæ albæ, cervino vix marginatæ, venis apice fuscis.*

Female. Very pale fawn-colour. Thorax with a black band in front. Abdomen whitish fawn-colour, slightly crested, darker at the tip, white at the base. Fore wings with some oblique brown streaks along the costa, which towards the tip is cinereous-brown, with pale dots; two or three black dots in the disk near the costa and a double row of marginal black dots; a black basal line and a dark brown interrupted streak near the interior angle. Hind wings white, slightly tinged with fawn-colour along the border; veins brown towards the tips. Length of the body 9 lines; of the wings 20 lines.

a. Caffraria. From M. Becker's collection.

New Zealand.

19. Xylina ustistriga.

Cinerea, fusco tincta; abdomen pallidum, apice rufescente-ferrugineum; alæ anticæ annulis tribus nigris informibus discalibus, fascia exteriore incompleta strigaque distincta apud angulum interiorem ferrugineo-fuscis, lituris costalibus ciliisque ferrugineis; posticæ fuscescentes.

Cinereous, tinged with brown. Abdomen pale cinereous, reddish ferruginous at the tip. Fore wings with three very irregular black discal ringlets, with a very incomplete ferruginous-brown band

near the exterior border, with a distinct ferruginous brown streak near the interior angle, and with ferruginous marks along the costa; ciliæ ferruginous. Hind wings brownish. Length of the body 7—8 lines; of the wings 16—18 lines.

a, *b*. New Zealand. Presented by the Rev. W. Colonso.

20. Xylina lignisecta.

Fœm. *Cinerea, ferrugineo suffusa; alæ anticæ lineis transversis albidis indistinctis undulatis, claviformi, orbiculari et reniformi magnis nigro ex parte marginatis, orbiculari oblonga et reniformi e striga nigra connexis, striga nigra strigulaque nigra albo marginata apud angulum interiorem, lituris submarginalibus nigris; posticæ æneo-fuscæ, basi cinereæ, ciliis albido marginatis.*

Female. Cinereous, with a ferruginous tinge. Fore wings with the transverse lines whitish, indistinct and undulating; claviform, orbicular and reniform spots large, partly bordered with black; orbicular oblong, connected by a black streak with the reniform; a black streak near the interior angle, traversed obliquely by a small black whitish-bordered streak; a row of submarginal black marks. Hind wings æneous-brown, cinereous towards the base; ciliæ with whitish borders. Length of the body 8 lines; of the wings 18 lines.

a. New Zealand.

21. Xylina spurcata.

Fœm. *Pallide cinerea; thorax antice nigro fasciatus; alæ anticæ pallide testaceæ, ex parte nigro conspersæ, linea interrupta nigra, plaga cervina strigam obscure fuscam usque ad marginem emittente, strigis marginalibus nigris cervino marginatis, orbiculari subrotunda sat magna; posticæ cinereæ.*

Female. Pale cinereous. Thorax with a black band in front. Fore wings pale testaceous, partly and very slightly speckled with black, with an interrupted black line, which is enclosed in an irregular fawn-coloured patch, the latter communicating by a dark brown streak with the exterior border; a row of black marginal streaks with fawn-coloured borders; orbicular and reniform spots partly enclosed in the patch, the former rather large and nearly round. Hind wings cinereous. Length of the body 6 lines; of the wings 14 lines.

a, *b*. New Zealand. Presented by Col. Bolton.

22. Xylina inquieta.

Mas. *Testacea; thorax anticus albido fasciatus; abdomen pallidum; albæ anticæ nigro subconspersæ, lituris costalibus fuscis obliquis, strigis discalibus fuscis indistinctis, orbiculari obsoleta, reniformi e gutta nigra annuloque fusco, linea exteriore duplicata guttulari nigra, ciliis albo strigatis; posticæ albæ, margine subfuscescente, guttis nigricantibus.*

Male. Testaceous. Thorax with a whitish band in front. Abdomen paler than the thorax; apical tuft rather long. Fore wings thinly speckled with black, with brown oblique marks along the costa, and with slight brown streaks in the disk; orbicular spot obsolete; reniform indicated by a black dot and an indistinct pale brown ringlet; a double exterior band of black dots; ciliæ with white streaks. Hind wings white; borders with blackish dots, and slightly tinged with brown. Length of the body 5 lines; of the wings 13 lines.

a. ———?

Genus 10. LYNCESTIS.

Corpus robustum. Palpi caput paullo superantes; articulus 3us parvus, conicus. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas paullo superans. Alæ anticæ longiusculæ, sat angustæ, apud costam vix convexæ, apice acuminatæ, margine exteriore perobliquo subdenticulato; posticæ subdenticulatæ.

Body robust. Palpi extending a little beyond the head; third joint small, conical. Antennæ simple, more than half the length of the body. Abdomen extending a little beyond the hind wings. Fore wings rather long and narrow, hardly convex in front, acuminated at the tips, very oblique and slightly denticulated along the exterior border. Hind wings slightly denticulated.

1. Lyncestis Amphix.

Canescens, roseo vix subtincta; thorax et abdomen vitta cruciformi nigra; alæ anticæ substrigatæ, guttis tribus discalibus punctisque apud marginem interiorem nigris; posticæ albæ, margine latissimo nigro.

Phalæna-Noctua Amphix, *Cram. Pap. Exot.* ii. 59, pl. 134, f. C. Coromandel.

Genus 11. CYRRHESTA.

Corpus robustum. Palpi breves, caput paullo superantes; articulus 3us minutus. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas triente superans. Alæ anticæ longæ, angustæ, apud costam vix convexæ, apice acutæ, margine exteriore integro vix obliquo; posticæ subdentatæ?

Body robust. Palpi short, extending a little beyond the head; third joint minute. Antennæ simple, more than half the length of the body. Abdomen extending for full one-third of its length beyond the hind wings. Fore wings narrow, long, hardly convex in front, acute at the tips, entire and very slightly oblique along the exterior border. Hind wings with three indentations? along the exterior border.

1. Cyrrhesta Nyseus.

Cervina; thorax plagis duabus lateralibus cinereis; alæ anticæ albæ nigro punctatæ, costa lineisque transversis arcuatis nonnullis testaceis; posticæ subangulatæ nigræ, basi albæ, testaceo ciliatæ.

Phalæna-Noctua Nyssus, *Cram, Pap. Exot.* i. 119, pl. 75, f. E.

Surinam.

Genus 12. NYSTALEA.

Corpus robustum. Caput fasciculatum. Proboscis mediocriter longa. Palpi oblique ascendentes, caput perpaullo superantes; articulus 2us valde robustus; 3us gracilis, cylindricus, 2i quadrante non longior. Antennæ corporis dimidio vix longiores. Abdomen alas posticas dimidio superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ anticæ longæ, angustæ, apud costam vix convexæ, apice angulatæ, margine exteriore subconvexo perobliquo. *Mas.*—Antennæ subserratæ.

Nystalea, *Guen. Noct.* ii. 122.
Trigonophora, p., *Hübn. Verz. Schmett.* 217.

Body stout. Head with a frontal tuft. Proboscis moderately long. Palpi obliquely ascending, extending very little beyond the head; second joint very stout; third joint slender, cylindrical, not more than one-fourth of the length of the second. Antennæ full

half the length of the body. Abdomen extending for half its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Fore wings long and narrow, hardly convex in front, angular at the tips, slightly convex and very oblique along the exterior border. *Male.*—Antennæ minutely serrated.

Nystalea, like several other exotic genera of the first group, partly assumes the characters of the second group, and the peculiar structure of the latter is but slightly developed in its European species.

1. Nystalea conchyfera.

Ligno-fusca; abdomen cinerascens; alæ anticæ costa margineque exteriore ex parte lineisque lanceolatis obscure fuscis, costa basali subferruginea, plagis duabus (una costali altera apicali) testaceis, macula discali postica lineaque submarginali guttulari nigris; posticæ albidæ, iridescentes, semihyalinæ, margine lato fusco, ciliis sordide albidis.

Nystalea conchyfera, *Guen. Noct.* ii. 122, 845.

Isle St. Thomas.

This is probably a variety of *N. Ebalea*.

a—*c*. St. Domingo. From Mr. Tweedie's collection.
d. ——? Presented by E. Doubleday, Esq.
e. Jamaica.
f. Spirito Sancto, Brazil. From Mr. Stevens' collection.

2. Nystalea Ebalea.

Roseo-ferruginea; alæ anticæ nigro-fuscæ, striga basali plagaque apud angulum interiorem roseis, hac nigro punctata, ocellis duobus costalibus nigris roseo luteoque marginatis, ocello discali postico nigro luteoque; posticæ roseæ, margine nigricante, ciliis luteis.

Phalæna-Noctua Ebalea, *Cram. Pap. Exot.* iv. 41, pl. 310, f. C.
Nystalea Ebalea, *Guen. Noct.* ii. 123, 847.

Surinam.

Group 2.

Corpus sat robustum. Caput fasciculo postice inclinato. Proboscis mediocriter longa. Palpi subrecti; articulus 3us cylindricus,

2i triente aut dimidio non brevior. Antennæ simplices, graciles. Alæ anticæ lanceolatæ, apud costam subconvexæ, apice acuminatæ.

Body moderately stout. Head with a frontal tuft sloping backward. Palpi ascending, almost vertical; third joint cylindrical, one-third or one-half of the length of the second. Antennæ simple, slender, about half the length of the body. Wings lanceolate, slightly convex in front, acuminated at the tips, very oblique along the exterior border.

3. Nystalea superciliosa.

Ferrugineo-fusca; alæ anticæ lineis lanceolatis, puncto discali, strigis transversis exterioribus lineaque submarginali subduplicata undulata nigris aut nigro-fuscis, plaga exteriore transversa indistincta ferruginea fusco lineata; posticæ albidæ, margine latissimo ferruginoso, ciliis albidis.

Nystalea superciliosa, *Guen. Noct.* ii. 123, 846.

Cayenne.

a. St. Domingo. From M. Becker's collection.
b, *c*. St. Domingo. From Mr. Tweedie's collection.

4. Nystalea lineiplena.

Pallide ligno-fusca; abdomen cinerascens; alæ anticæ lineis strigisque variis nigris, purpurascente-cinereo ex parte nebulosæ, guttis duabus discalibus nigris; posticæ albidæ, iridescentes, semihyalinæ, margine lato fusco, ciliis sordide albidis.

Pale ligneous brown. Abdomen more cinereous. Fore wings with various black lines and streaks, partly shaded with purplish cinereous; two black dots, one behind the other in the disk. Hind wings whitish, iridescent, semihyaline, with broad brown borders; ciliæ dingy whitish. Length of the body 12 lines; of the wings 25 lines.

a. Parà. From Mr. Johnson's collection.

5. Nystalea guttiplena.

Fuscescente-cinerea; alæ anticæ fusco subconspersæ, lituris costalibus transversis fuscis, maculis duabus discalibus guttisque exterioribus submarginalibus et marginalibus nigris, strigis submarginalibus fuscis; posticæ iridescentes, semihyalinæ, venis margineque lato fuscis, ciliis albidis.

Brownish cinereous. Third joint of the palpi longer than that of the preceding species. Fore wings minutely speckled with brown, with transverse brown marks along the costa, with two small black spots in the disk, one behind the other, and with black dots on the exterior veins; submarginal line composed of black dots, traversing a row of brown submarginal streaks, which extend to the black marginal dots. Hind wings iridescent, semihyaline, with brown veins and broad brown borders; ciliæ whitish. Length of the body 10? lines; of the wings 24 lines.

a. ———?

6. Nystalea Focula.

Fusca; thorax plagis duabus lateralibus albis cervino guttatis; abdomen ferrugineum, basi cervinum; alæ anticæ apud costam ex parte cervinæ, striga basali alba, fascia obliqua interiore albido-rosea fasciaque obliqua exteriore albo necnon cinereo flavoque vittam arcuatam fingentibus, guttis marginalibus albis nigro marginatis; posticæ fascia apud marginem interiorem postice dilatata ciliisque cervinis.

Phalæna-Noctua Focula, *Cram. Pap. Exot.* iv. 187, pl. 383, f. G, H.
Trigonophora Focula, *Hübn. Verz. Schmett.* 217, 2166.

Surinam.

7. Nystalea inchoans.

Mas. *Cinereo-fusca; palporum articulus 3us 2i triente paullo longior; antennæ serratæ, apices versus simplices; abdomen alas posticas dimidio superans, fasciculo apicali bifurcato; pedes densissime ciliati, femoribus anticis argenteo squamosis; alæ anticæ lineis duabus triplicatis valde incompletis, vitta tenui strigisque exterioribus fuscis, linea submarginali undulata e guttis nigris; posticæ cinereæ, margine lato fuscescente.*

Male. Cinereous-brown. Third joint of the palpi rather more than one-third of the length of the second. Antennæ serrated, simple towards the tips. Abdomen extending for full half its length beyond the hind wings; apical tuft bifurcate. Legs most densely ciliated; fore femora with silvery scales. Fore wings with two very incomplete triple brown bands, with a slender brown stripe, and with exterior brown streaks; submarginal line slightly undulating, composed of black dots. Hind wings cinereous, with broad brownish borders. Length of the body 14 lines; of the wings 28 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 13. CUCULLIA.

Corpus robustum. Proboscis mediocriter longa. Palpi pilosissimi, subascendentes, caput vix superantes; articulus 3us minimus. Antennæ simplices, validæ, corporis dimidio non breviores. Thoracis tegulæ bene determinatæ. Abdomen cristatum, alas posticas longæ superans. Pedes longiusculi; tibiæ posticæ calcaribus longis. Alæ anticæ longæ, angustæ, lanceolatæ, apud costam subrectæ, apice acutæ, margine exteriore perobliquo, denticulato aut integro.

Cucullia, p., *Ochs.; Treit.; Steph.; Boisd.; Dup.; Herr.-Schæff.; Guen. Ann. Soc. Ent. Fr.* viii. 507; *Noct.* ii. 123.
Cucullia, Enderæa, Eucalimia, Callænia, et Empusa, *Hübn. Verz. Schmett.*

Body stout. Proboscis moderately long. Palpi slightly ascending, very pilose, hardly extending beyond the head; third joint very minute. Antennæ simple, stout, full half the length of the body. Thorax with large lappets. Abdomen crested, extending for half its length or rather less beyond the hind wings. Legs rather long; hind tibiæ with long spurs. Fore wings lanceolate, long and narrow, nearly straight in front, acute at the tips, very oblique along the exterior border, which is denticulated or entire.

Group 1.

Alæ anticæ lignicolores, maculis obsoletis aut subobsoletis, lineis indistinctis.

Fore wings wood-colour; orbicular and reniform spots obsolete or hardly visible; lines indistinct.

A. Alæ anticæ valde acuminatæ.
  A. Alæ anticæ costa fusca. - - - Verbasci, *Linn.*
  B. Alæ anticæ costa nigricante. - Scrophulariæ, *Wien. Verz.*
B. Alæ anticæ minus acuminatæ.
  A. Alæ anticæ vitta discali vix cinerea.
    A. Alæ anticæ non nigro-fuscæ.
      a. Alæ anticæ apud costam fuscæ.
        i. Alæ anticæ apud costam obscuriores. Lychnitis, *Ramb.*
        ii. Alæ anticæ apud costam vix obscuriores.
          Thapsiphaga, *Treit.*

b. Alæ anticæ apud costam nigræ. - Prenanthis, *Boisd.*
B. Alæ anticæ nigro-fuscæ, apice pallidiores. - Celsiæ, *Friv.*
B. Alæ anticæ vitta discali cinerea aut albida.
A. Alæ posticæ ciliis pallidis. - - - Blattariæ, *Esp.*
B. Alæ posticæ ciliis nigro guttatis. Scrophularivora, *Ramb.*
C. Alæ posticæ ciliis obscuris. - Scrophulariphaga, *Ramb.*

1. Cucullia Verbasci.

Lignicolora; caput fusco varium; thorax fascia vittisque duabus albidis fusco marginatis; abdomen cristis fuscis; alæ anticæ ferrugineo marginatæ, strigis discalibus pallide ferrugineis, vitta postica albida, strigis apud marginem interiorem nigricantibus et pallidis, punctis paucis discalibus fuscis; posticæ albidæ, margine fusco.

——— ———, *Aldrov. Ins.* pl. 13, *Rai. Ins.* 168, 25; 352, 31. *Reaum, Ins.* i. pl. 43, f. 9—11. *Roës. Ins.* i. pl. 23, f. 1—5. *Frisch, Ins.* 6, pl. 9. *Merian, Ins. Eur.* iii. pl. 29. *Geoffr. Ins. Par.* ii. 158, 96. *Wilk. Pap.* 7, pl. 1, a. 15. *Sulz. Hist. Ins.* pl. 22, f. 7. *Engr. Pap. d'Eur.* 363, a—h. *Harris, Aurel.* pl. 8, f. a, d.

Phalæna-Noctua Verbasci, *Linn. Syst. Nat.* 850, 153; *Faun. Suec.* 1186. *Scop. Ent. Carn.* 521. *Gmel. ed. Syst. Nat.* i. 5, 2566, 153.

Noctua Verbasci, *Wien. Verz.* 73, 4. *Fabr. Sp. Ins.* ii. 239, 145; *Mant. Ins.* ii. 180, 291; *Ent. Syst.* iii. 2, 120, 353. *Esp. Schmett.* iv. pl. 139, f. 1—4. *Bork. Eur. Schmett.* iv. 303, 127. *Donov. Brit. Ins.* viii. pl. 257. *Hübn. Eur. Schmett. Noct.* pl. 55, f. 266. *Haw. Lep. Brit.* 20. *Dup. Hist. Nat. Lép. Fr.* vii. 392, pl. 124, f. 1, 2. *Frey. Beit.* pl. 82.

Cucullia Verbasci, *Hübn. Verz. Schmett.* 246, 2450. *Treit. Schmett.* v. 127, 18. *Meig. Handb.* 178, 79; *Syst. Besch.* iii. 2, 194, 1, pl. 111, f. 7. *Steph. Ill. Brit. Ent. Haust.* iii. 85. *Ramb. Ent. Soc. Ent. Fr.* ii. 9, pl. 1, f. 6. *Boisd. Ind. Méth.* 155, 1255. *Herr.-Schæff. Schmett. Eur.* ii. 313, 396. *Guen. Noct.* ii. 126, 848.

a—n. England. From Mr. Stephens' collection.
o—r. England.
s—u. Europe. From M. Becker's collection.

2. Cucullia Scrophulariæ.

Pallide lignicolora; caput ferrugineum; thorax fascia duplicata vittisque duabus pallidis ferrugineo marginatis; abdomen cristis nigricantibus; alæ anticæ lineis nonnullis discalibus pallide ferrugineis, costa margineque interiore, guttis paucis discalibus albis, lineola discali e punctis nigris; posticæ albidæ, margine fuscescente, ciliis albidis fusco interlineatis.

Noctua Scrophulariæ, *Wien. Verz. Ann.* 312. *Esp. Schmett.* iv. pl. 180, f. 4. *Bork. Eur. Schmett.* iv. 307, 128. *Sepp. Ins.* iii. pl. 15. *Naturf.* 1789, 91, pl. 3, f. 1—4. *Hübn. Eur. Schmett. Noct.* pl. 53, f. 260.

Cucullia Scrophulariæ, *Hübn. Verz. Schmett.* 246, 2451. *Treit. Schmett.* v. 130, 19. *Ramb. Ann. Soc. Ent. Fr.* ii. 14, pl. 1, f. 1, a. *Dup. Hist. Nat. Lép. Fr. Suppl.* vii. pl. 2, f. 1. *Steph. Ill. Brit. Ent. Haust.* iii. 85. *Boisd. Ind. Méth.* 155, 1254. *Herr.-Schæff. Schmett. Eur.* ii. 313, 397. *Guen. Noct.* ii. 127, 849.

Phalæna Verbasci, *Wilk.* pl. 15. *Scop. Ent. Carn.* 521. *Sulz-Ræm.* pl. 22, f. 7.

a—g. England. From Mr. Stephens' collection.
h, i. Europe. From M. Becker's collection.
j. Germany.
k. ———?

3. Cucullia Lychnitis.

Pallide lignicolora; thorax lineis transversis albidis; abdomen cristis nigricantibus; alæ anticæ apud costam fusco-cinereæ, lineola discali e punctis nigris, strigis paucis exterioribus ferrugineis, vitta postica ferruginea nigro interlineata; posticæ albidæ, margine fusco, ciliis albidis.

——— ———, *Engr. Pap. d'Eur.* 365, a, b.

Noctua Scrophulariæ, *Esp. Schmett.* iv. pl. 180, f. 4. *Dup. Hist. Nat. Lép. Fr.* vii. 396, pl. 124, f. 3. *Frey. Beit.* pl. 83.

Cucullia Scrophulariæ, *Treit. Schmett. Suppl.* 129.

Cucullia Lychnitis, *Ramb. Ent. Soc. Ent. Fr.* ii. 17, pl. 1, f. 3, e. *Dup. Hist. Nat. Lép. Fr. Suppl.* vii. pl. 2, f. 2. *Boisd. Ramb. et Grasl. Chen.* pl. 15, f. 3, 4. *Boisd. Ind. Méth.* 155, 1253. *Guen. Noct.* ii. 128, 850. *Herr.-Schæff. Eur. Schmett.* ii. 313, 398, pl. 40, f. 204?

Species distincta? Cucullia rivulorum, *Guen. Ess.* 509; *Ind.* 245.

France. Corsica.

a—d. England. From Mr. Stephens' collection.
e, f. England.
g, h. Europe. From M. Becker's collection.

4. Cucullia Blattariæ.

Albido lignicolora; abdomen cristis nigricantibus; alæ anticæ costa fusco-cinerea, punctis discalibus nigris, vitta postica alba, margine interiore ferrugineo lineolis nigris; posticæ pallide cinerascentes, margine latissimo fusco, ciliis albidis, fusco interlineatis.

Noctua Blattariæ, *Esp. Schmett.* iv. pl. 154, f. 4. *Bork. Eur. Schmett.* iv. 131. *Frey. Beit.* pl. 81?
Cucullia Blattariæ, *Treit. Schmett.* v. 125. *Boisd. Ind. Méth.* 155, 1250. *Herr.-Schæff. Schmett. Eur.* ii. 313, 399, pl. 40, f. 202, 203. *Guen. Noct.* ii. 129, 851.
Cucullia Caninæ, *Ramb. Ann. Soc. Ent. Fr.* ii. 19, pl. 1, f. 5, e. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 415, pl. 37, f. 2.
Noctua Thapsiphaga, *Dup. Lép.* vii. 398, pl. 124, f. 4.

France. Italy. Corsica. Dalmatia.

a—d. Europe. From M. Becker's collection.

5. Cucullia Thapsiphaga.

Pallide lignicolora; thorax lineis transversis albidis, fascia vittisque duabus fuscis; abdomen cristis nigris; alæ anticæ disco strigis albidis, costa cinerea, lineola undulata obliqua fusca, punctis discalibus nigris, apud vittam posticam ferrugineam nigro lineolatam; posticæ cinereæ, margine fuscescente, ciliis albo marginatis.

Cucullia Thapsiphaga, *Treits. Schmett.* v. 120, pl. 5, f. 3. *Ramb. Ann. Soc. Ent. Fr.* ii. 22, pl. 1, f. 2, b. *Boisd. Ind. Meth.* 155, 1251. *Guen. Noct.* ii. 130, 852.
Noctua Thapsiphaga, *Frey. Beit.* pl. 80.
Cucullia Blattariæ? *Herr.-Schæff. Eur. Schmett.* ii. 313, 399, pl. 40, f. 202, 203.

Germany. France. Corsica. Sicily. Hungary.

a, b. Europe. From M. Becker's collection.

6. Cucullia Scrophularivora.

Fusca; thorax lineis duabus obliquis albis; abdomen cinerascens, vitta dorsali maculari nigricante; alæ anticæ lineolis nebulisque nigricantibus, vitta postica alba; posticæ testaceo-albæ, lineola discali margineque lato nigro-fuscis, ciliis albis nigro guttatis.

Cucullia Thapsiphaga, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 405, pl. 36, f. 4.

Cucullia Scrophularivora, *Ramb. Guen. Ind.* 245; *Noct.* ii. 130, 853.

France. Spain. Hungary.

7. Cucullia Scrophulariphaga.

Cinerascens; thorax lineis transversis albidis, fascia vittisque duabus fuscis; abdomen cristis nigricantibus; alæ anticæ guttis costalibus albidis, disco antice subcervino postice albido, lineola discali e punctis nigris, lineola undulata obliqua apud vittam posticam ferrugineam nigro lineolatam; posticæ fuscæ ciliis albido marginatis.

Cucullia Scrophulariphaga, *Ramb. Ann. Soc. Ent. Fr.* ii. 20, pl. 1, f. 4, d. *Boisd. Ind. Méth.* 155, 1250. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 409, pl. 36, f. 5. *Guen. Noct.* ii. 131, 854.

Corsica.

a, *b*. Europe. From M. Becker's collection.

8. Cucullia Prenanthis.

Lignicolora; caput, thoracis fascia abdominisque cristæ nigro-fusca; thorax lineis transversis anticis albidis; alæ anticæ costa nigro-fusca guttis exterioribus albidis, vitta postica albida, vitta marginali subinterrupta nigra; posticæ cupreo-fuscescentes, ciliis albo marginatis.

Cucullia Prenanthis, *Boisd. Ind. Méth.* 154, 1249. *Guen. Noct.* ii. 132, 855.

Noctua Blattariæ, *Dup. Hist. Nat. Lép. Fr.* vii. pl. 401, f. 124.

Noctua Ceramanthæ, *Frey. Beitr.* v. pl. 432.

Cucullia Ceramanthæ, *Frivaldsky. Herr.-Schæff. Eur. Schmett.* ii. 311, 394, pl. 37, f. 185, 186.

Ukraine.

9. Cucullia Celsiæ.

Nigro-fusca; thorax antice posticeque, abdomen et alarum anticarum triente exteriore obliqua ligno-fuscis; posticæ fuscæ, basi ciliisque pallidioribus.

Cucullia Celsiæ, *Frivaldsky*. *Herr.-Schæff. Eur. Schmett.* ii. 311, 393, pl. 36, f. 182. *Guen. Noct.* ii. 132, 856.

Salonica.

Group 2.

Alæ anticæ sæpissime cinereæ, lineolis nonnullis nigris, maculis nonnunquam conspicuis.

Fore wings generally cinereous, with some black lines; orbicular and reniform spots occasionally visible.

A. Alæ anticæ maculis conspicuis.
  A. Alæ anticæ apud maculas non guttatæ.
    A. Alæ anticæ plaga postica nulla, aut subobsoleta.
      a. Alæ anticæ maculis bene determinatis.
        i. Alæ anticæ fusco-cinereæ. - Gnaphalii, *Hübn.*
        ii. Alæ anticæ cinereæ. - - cineracea, *Frey.*
      b. Alæ anticæ maculis non bene determinatis. Xeranthemi, *Boisd.*
    B. Alæ anticæ plaga postica pallida conspicua.
      a. Alæ anticæ maculis determinatis.
        i. Alæ anticæ fulvo variæ. - spectabilis, *Hübn.*
        ii. Alæ anticæ cervino variæ. - propinqua, *Eversm.*
        iii. Alæ anticæ ferrugineo variæ.
          * Alæ anticæ maculis determinatis. Fuchsiana, *Eversm.*
          ** Alæ anticæ maculis non bene determinatis. Anthemidis, *Boisd.*
        iv. Alæ anticæ ochraceo variæ. - Achilleæ, *Boisd.*
      b. Alæ anticæ maculis non determinatis. fraudatrix, *Eversm.*
  B. Alæ anticæ apud maculas guttatæ. - Absinthii, *Linn.*
B. Alæ anticæ maculis obsoletis, aut subobsoletis.
  A. Alæ anticæ apud costam fuscæ.
    A. Thorax antice fuscus. - - Asteris, *Wien. Verz.*
    B. Thorax non antice fuscus.

a. Alæ anticæ rufescente conspersæ. - mixta, *Frey.*
b. Alæ anticæ non rufescente conspersæ. Dracunculi, *Hübn.*
B. Alæ anticæ apud costam cinereæ.
A. Alæ posticæ albæ.
a. Alæ anticæ maculatæ.
i. Minor. - - - - - Santonici, *Hübn.*
ii. Major. - - - - - odorata, *Guen.*
b. Alæ anticæ non maculatæ.
i. Alæ anticæ punctis discalibus nigris.
Boryphora, *Fisch.*
ii. Alæ anticæ punctis nullis discalibus nigris.
Tanaceti, *Wien. Verz.*
B. Alæ posticæ plus minusve obscuræ.
a. Alæ anticæ angustiores.
i. Alæ anticæ striga postica nigra. - Santolinæ, *Ramb.*
ii. Alæ anticæ striga nulla postica nigra.
* Alæ anticæ cervino non tinctæ.
† Macula reniformis obsoleta.
‡ Alæ anticæ albido nebulosæ. præcana, *Eversm.*
‡‡ Alæ anticæ albido non nebulosæ.
§ Alæ anticæ strigis nullis obliquis costalibus.
× Alæ anticæ linea nulla marginali nigra.
0 Obscurior. - Chamomillæ, *Wien. Verz.*
00 Pallidior. - Calendulæ, *Dahl.*
×× Alæ anticæ linea marginali nigra.
Umbratica, *Linn.*
§§ Alæ anticæ strigis obliquis costalibus.
Campanulæ, *Frey.*
†† Macula reniformis distincta, minima.
pustulata, *Eversm.*
** Alæ anticæ cervino tinctæ. - Virgaureæ, *Boisd.*
*** Alæ anticæ testaceo bivittatæ. - biornata, *Frey.*
**** Alæ anticæ linea basali strigaque discali luteis.
Balsamitæ, *Boisd.*
b. Alæ anticæ latiores.
† Alæ anticæ lineis angulosis conspicuis.
lucifuga, *Wien. Verz.*
†† Alæ anticæ lineis angulosis non conspicuis.
Lactucæ, *Wien. Verz.*

10. Cucullia Asteris.

Cinerea; caput nigro-fuscum; thorax antice lignicolor, fascia vittisque duabus nigris; abdomen nigro cristatum; alæ anticæ apud costam lignicolores, orbiculari et reniformi albidis subquadratis, vitta postica ferruginea nigro lineata; posticæ fusco-cupreæ, ciliis albis.

——— ———, *Engr. Pap. d'Eur.* 364, a—c.

Noctua Asteris, *Wien. Verz.* 312, 10. *Fabr. Mant. Ins.* ii. 180, 292; *Ent. Syst.* iii. 2, 121, 364. *Esp. Schmett.* iv. pl. 154, pl. 2, 3. *Bork. Eur. Schmett.* iv. 310, 129. *Hübn. Eur. Schmett. Noct.* pl. 53, f. 260. *Haw. Lep. Brit.* 22. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 125, f. 1.

Phalæna-Noctua Asteris, *Gmel. ed. Syst. Nat.* i. 5, 2566, 1138.

Euderæa Asteris, *Hübn. Verz. Schmett.* 245, 2438.

Cucullia Asteris, *Treit. Schmett.* v. 118, 15. *Meig. Handb.* 178, 78; *Syst. Besch.* iii. 195, 3, pl. 111, f. 9. *Curt. Brit. Ent.* pl. 45. *Steph. Ill. Brit. Ent. Haust.* iii. 86. *Boisd. Ind. Méth.* 154, 1248. *Herr.-Schæff. Schmett. Eur.* ii. 311, 395. *Guen. Noct.* ii. 133, 857.

a—c. England. From Mr. Stephens' collection.
d—f. England.
g—j. Europe. From M. Becker's collection.
k, l. Europe.

11. Cucullia Gnaphalii.

Fusco-cinerascens; thorax fascia nigra; alæ anticæ lineis incompletis nigris, orbiculari et reniformi magnis subquadratis cano marginatis, gutta postica cana; posticæ fuscescentes, ciliis albidis.

Noctua Gnaphalii, *Hübn. Eur. Schmett. Noct.* pl. 126, f. 582, 583. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 125, f. 4. *Frey. Neue Beitr.* pl. 5.

Eucalimia Gnaphalii, *Hübn. Verz. Schmett.* 245, 2440.

Cucullia Gnaphalii, *Treit. Schmett.* v. 87, 2. *Meig. Syst. Besch.* iii. 196, 5, pl. 111, f. 11. *Eversm. Faun. Volg-Ural.* 309. *Boisd. Ind. Méth.* 153, 1227. *Herr.-Schæff. Schmett. Eur.* ii. 309, 389, pl. 40, f. 200, 201. *Guen. Noct.*. ii. 134, 861.

Cucullia Thapsiphaga? *Steph. Ill. Brit. Ent. Haust.* iii. 87.

a. England.
b. Odessa. Presented by Dr. Dowler.
c—g. Europe. From M. Becker's collection.
h. Europe.

12. Cucullia Xeranthemi.

Cinerea; thorax fascia antica nigra; abdomen pallidum, cristis nigris; alæ anticæ lineis lanceolatis canis et fuscescentibus, orbiculari et reniformi parvis indistinctis albido marginatis, lineola postica submarginali guttisque marginalibus nigris; posticæ cinerascentes, semihyalinæ, margine lato fusco-cupreo, ciliis albidis.

Cucullia Xeranthemi, *Boisd. Ind. Méth.* 153, 1228. *Herr.-Schæff. Schmett. Eur.* ii. 309, 390, pl. 39, f. 195; pl. 94, f. 481. *Guen. Noct.* ii. 135, 862.

South France.

13. Cucullia Abrotani.

Cinerea; abdomen albidum, vitta dorsali nigricante; alæ anticæ nebulosæ, lineis transversis denticulatis nigris, orbiculari et reniformi magnis distinctis albido nigroque marginatis, striga postica fasciaque obliqua exteriore albidis; posticæ albidæ, fusco latissime marginatæ, ciliis albis.

——— ———, *Roës. Ins.* iii. pl. 51, f. 1—4. *Engr. Pap. d'Eur.* 362, a, f.

Noctua Abrotani, *Wien. Verz.* 73, 2. *Fabr. Mant. Ins.* ii. 166, 211; *Ent. Syst.* iii. 2, 88, 262. *Bork. Eur. Schmett.* iv. 284, 120. *Hübn. Eur. Schmett. Noct.* pl. 53, f. 257. *Dup. Hist. Nat. Lép. Fr.* vii. 415, pl. 125, f. 6. *Frey. Beitr.* iv. pl. 320.

Phalæna-Noctua Abrotani, *Gmel. ed. Syst. Nat.* i. 5, 2559, 1118.

Noctua Artemisiæ, *Knoch, Beitr.* 47, pl. 2, f. 10. *Fuessl. Ins.* 6. *Esp. Schmett.* iv. pl. 128.

Eucalimia Abrotani, *Hübn. Verz. Schmett.* 135, 863.

Cucullia Abrotani, *Treit. Schmett.* v. 88, 3. *Meig. Handb.* 179, 81; *Syst. Besch.* iii. 197, 6, pl. 112, f. 7. *Boisd. Ind. Méth.* 153, 1232. *Herr.-Schæff. Schmett. Eur.* ii. 309, 388. *Guen. Noct.* ii. 135, 863.

a—e. Europe. From M. Becker's collection.
f. Germany.

14. Cucullia Absinthii.

Cana; abdomen albidum; alæ anticæ cinerascentes, guttis discalibus et marginalibus fasciaque diffusa interiore nigris; posticæ albidæ, fuscescente marginatæ, ciliis albis.

———, *Röes. Ins.* i. pl. 61. *Engr. Pap. d'Eur.* 361, a, e *Frisch. Ins.* 7, pl. 12. *Geoffr. Ins. Par.* ii. 158, 95.

Phalæna-Noctua Absinthii, *Linn. Syst. Nat.* 845, 133; *Faun. Suec.* 1182. *Clerck, Icon.* pl. 8, f. 19. *Gmel. ed. Syst. Nat.* i. 5, 2558, 133.

Noctua Absinthii, *Wien. Verz.* 73, 1. *Fabr. Sp. Ins.* ii. 230, 109; *Mant. Ins.* ii. 166, 210; *Ent. Syst.* iii. 2, 88, 261. *Esp. Schmett.* iv. pl. 116, f. 1—3. *Bork. Eur. Schmett.* iv. 281, 119. *Hübn. Eur. Schmett. Noct.* pl. 53, f. 258. *Dup. Hist. Nat. Lép. Fr* vii. 418, pl. 125, f. 7. *Frey. Beitr.* iv. pl. 321. *Haw. Lep. Brit.* 23. *Donov. Brit. Ins.* ix. 304.

Noctua punctigera, *Berl. Mag.* iii. 100.

Eucalimia Absinthii, *Hübn. Verz. Schmett.* 246, 2444.

Cucullia Absinthii, *Treit. Schmett.* v. 92, 4. *Meig. Handb.* 179, 82; *Syst. Besch.* iii. 197, 7, pl. 111, f. 12. *Steph. Ill. Brit. Ent. Haust.* iii. 91. *Boisd. Ind. Méth.* 153, 1233. *Herr.-Schæff. Schmett. Eur.* ii. 310, 392. *Guen. Noct.* ii. 136, 864.

a—f. England. From Mr. Stephens' collection.
g—j. England.
k—n. Europe. From M. Becker's collection.
o. Europe.

15. Cucullia propinqua.

Cinerea, nigro cervinoque varia; alæ anticæ lineis lanceolatis et macularum marginibus pallidioribus, striga discali postica alba; posticæ margine lato nigricante, ciliis albis.

Cucullia propinqua, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1848, pl. 5, f. 7; *Faun. Volg-Ural.* 309. *Herr.-Schæff. Schmett. Eur.* ii. 307, 383, pl. 37, f. 187. *Guen. Noct.* ii. 136, 865.

Ural Region.

16. Cucullia spectabilis.

Glauco-cinerea; thorax fulvo varius; alæ anticæ lineis transversis angulosis fulvis nigro marginatis, orbiculari testacea albo marginata, macula postica alba, reniformi nigricante fulvo marginata, linea submarginali alba, guttis marginalibus nigris; posticæ pallidæ, litura discali margineque latissimo cinereis, ciliis albidis.

Noctua spectabilis, *Hübn. Eur. Schmett. Noct.* f. 557. *Dup. Hist. Nat. Lép. Fr.* vii. 413, pl. 125.

Periphanes spectabilis, *Hübn. Verz. Schmett.* 248, 2457.
Cucullia spectabilis, *Treit. Schmett.* v. 86. *Eversm. Faun. Volg-Ural.* 310. *Boisd. Ind. Méth.* 153, 1226. *Herr.-Schæff. Schmett. Eur.* ii. 307, 382, pl. 38, f. 193. *Guen. Noct.* ii. 137, 866.

South Russia.

17. Cucullia Fuchsiana.

Cinerea; alæ anticæ ferrugineo variæ, lineis lanceolatis et macularum marginibus albidis nigrisque; posticæ margine latissimo obscuriore, ciliis albis.

Cucullia Fuchsiana, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1839, pl. 5, f. 6; *Faun. Volg-Ural.* 306. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 229, pl. 70, f. 2. *Herr.-Schæff. Schmett. Eur.* ii. 308, 385, pl. 38, f. 192. *Guen. Noct.* ii. 137, 867.

Ural Region.

18. Cucullia fraudatrix.

Cinerea; thorax fascia antica nigra; abdomen pallidum; alæ anticæ striga basali, fascia angulata interiore, lineolis duabus inter maculas strigisque tribus exterioribus nigris, orbiculari et reniformi necnon macula postica fasciaque obliqua exteriore canis; posticæ cinerascentes, margine fuscescente, ciliis albidis.

Cucullia fraudatrix, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837, 1; *Faun. Volg-Ural.* 306. *Guen. Noct.* ii. 137, 868.
Noctua fraudatrix, *Frey. Beitr.* v. pl. 388.
Cucullia Pontica, *Boisd. Ind. Meth.* 153, 1234.
Cucullia Pyrethri, *Herr.-Schæff. Schmett. Eur.* ii. 310, 391, pl. 36, f. 183.

South Russia.

a, *b*. Europe. From M. Becker's collection.
c. Ukraine. Presented by Dr. Dowler.

19. Cucullia cineracea.

Cinerea; abdomen testaceo-cinereum; alæ anticæ lineis lanceolatis et macularum marginibus canis, orbiculari et reniformi subquadratis bene determinatis; posticæ pallidæ, margine cinereo, ciliis albis.

Noctua cineracea, *Freyer*, *Neue Beitr.* pl. 352, f. 2; *Ent. Zeit. Stett.* ii. 108.
Cucullia cineracea, *Herr.-Schæff. Schmett. Eur.* ii. 309, 387, pl. 39, f. 196. *Guen. Noct.* ii. 138, 869.

South Russia.

20. Cucullia Santonici.

Cana; caput et thorax lineis transversis nigricantibus; abdomen sordide albidum; alæ anticæ ocellis duobus discalibus strigisque lanceolatis nigris, marginibus cinerascentibus; posticæ albidæ, venis margineque fuscescentibus.

Noctua Santonici, *Hübn. Eur. Schmett. Noct.* f. 584, 585, *Freyer*, *Neue Beitr.* iv. pl. 357; *Ent. Zeit. Stett.* ii. 109. *Dup. Hist. Nat. Lép. Fr.* vii. 407, pl. 125, f. 2.
Cucullia Santonici, *Eversm. Faun. Volg-Ural.* 306. *Boisd. Ind. Méth.* 153, 1229. *Dup. Suppl.* iii. 398, pl. 36. *Herr.-Schæff. Schmett. Eur.* ii. 308, 386. *Guen. Noct.* ii. 138, 870. *Meig. Syst. Besch.* iii. 196, 4, pl. 111, f. 10.
Eucalimia Santonici, *Hübn. Verz. Schmett.* 245, 2443.

East France. Valais. Ural Region.

a. Europe. From M. Becker's collection.

21. Cucullia odorata.

C. Santonici *simillima, major; palporum articulus 3us pilis 2is magis tecta; alæ anticæ latiores, minus lanceolatæ, plus glaucescentes, orbiculari majore, striga basali apud alam tenuiore.*

Cucullia odorata, *Guen. Noct.* ii. 139, 871.

Valais.

22. Cucullia Achilleæ.

Cinereo-alba; alæ anticæ maculis lineisque vix ullis, apices versus subdilatatæ, ex parte ochraceo subtinctæ, striga basali, linea apud marginem interiorem punctisque nigris; posticæ albæ, punctis marginalibus, fœm. *nigricante subtinctæ.*

Cucullia Achilleæ, *Boisd. MSS.* *Guen. Noct.* ii. 139, 872.

South Spain.

23. Cucullia Anthemidis.

Cinerea; palpi sat ascendentes; thorax linea antica nigra; alæ anticæ ex parte rufescente pallido subtinctæ, apud marginem exteriorem subquadratæ, maculis subobsoletis e punctis nigris, linea extrabasilari sat conspicua e striga basilari longa tenui nigra divisa; posticæ nigricante cinereæ, basi albæ. Fœm. —*Alæ anticæ ex parte plus rufescentes, strigis obscuris distinctioribus.*

Cucullia Anthemidis, *Boisd. MSS.* *Guen. Noct.* ii. 140, 873.

South France.

24. Cucullia Boryphora.

Albida; alæ anticæ cinerascentes, lineis lanceolatis albidis, punctis paucis discalibus guttisque marginalibus nigris, orbiculari et reniformi indistinctis; posticæ albæ, margine angusto cinereo.

Cucullia Boryphora, *Fisch. Bull. Mosc.* 1840, 85, pl. 3, f. 3. *Eversm. Faun. Volg-Ural.* 305. *Herr.-Schæff. Schmett. Eur.* ii. 315, 404, pl. 99, f. 508. *Guen. Noct.* ii. 140, 874.

Cucullia lignata, *Kind.* *Guen. Ind.* 246.

Cucullia rimula, *Freyer*, *Neue Beitr.* pl. 352, f. 1; *Ent. Zeit. Stett.* ii. 108.

Sarepta.

25. Cucullia Tanaceti.

Cana; antennæ fuscæ, basi albæ; abdomen albidum; alæ anticæ substrigatæ, linea interrupta discali nigra; posticæ albidæ, marginibus fuscis.

———, *Engr. Pap. d'Eur.* 366, a—c.

Noctua Tanaceti, *Wien. Verz.* 73, 5. *Fabr. Mant. Ins.* ii. 181, 294; *Ent. Syst.* iii. 2, 121, 366. *Bork. Eur. Schmett.* iv. 199, 126. *Hübn. Eur. Schmett. Noct.* pl. 54, f. 265. *Dup. Hist. Nat. Lép. Fr.* vii. 429, pl. 126, f. 4. *Knoch, Beit.* ii. 29, pl. 2, f. 1—9.

Cucullia Tanaceti, *Treit. Schmett.* v. 100. *Meig. Syst. Besch.* iii. 198, 8, pl. 112, f. 4. *Eversm. Faun. Volg-Ural.* 302. *Dup. Suppl.* vii. pl. 2, f. 3. *Boisd. Ind. Méth.* 154, 1240. *Herr.-Schæff. Schmett. Eur.* ii. 315, 405. *Guen. Noct.* ii. 141, 875.

Phalæna-Noctua Tanaceti, *Gmel. Syst. Nat.* i. 5, 2567, 1140.
Callænia Tanaceti, *Hübn. Verz. Schmett.* 246, 2449.

a—d. Europe. From M. Becker's collection.
e, f. Europe.

26. Cucullia Chamomillæ.

Cinerea; thorax fasciis duabus anticis fuscis unaque submarginali nigra; alæ anticæ lineis nigris, guttis costalibus subapicalibus albidis; posticæ fusco-cinerascentes, ciliis albis.

Noctua Chamomillæ, *Wien. Verz.* 73, 3. *Fabr. Mant. Ins.* ii. 180, 293; *Ent. Syst.* iii. 2, 121, 365. *Sepp. Ins.* iii. pl. 25, f. 6. *Esp. Schmett.* iv. pl. 193, f. 1, 2. *Bork. Eur. Schmett.* iv. 290, 122. *Hübn. Eur. Schmett. Noct.* pl. 54, f. 261. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 126, f. 3. *Haw. Lep. Brit.* 15.
Phalæna-Noctua Chamomillæ, *Gmel. ed. Syst. Nat.* i. 5, 2565, 113.
Cucullia Chamomillæ, *Treit. Schmett.* v. 111, 12. *Meig. Syst. Besch.* iii. 198, 9, pl. 112, f. 3. *Steph. Ill. Brit. Ent. Haust.* iii. 89. *Boisd. Ind. Méth.* 154, 1244. *Herr.-Schæff. Schmett. Eur.* ii. 315, 406. *Guen. Noct.* ii. 142, 876.
Noctua lucifuga, *Dup. Hist. Nat. Lép. Fr.* vii. 432, pl. 127, f. 1.
Noctua fissina, *Haw. Lep. Brit.* 19.
Cucullia fissina, *Steph. Ill. Brit. Ent. Haust.* iii. 90.
Var. Noctua Chrysanthemi, *Hübn. Eur. Schmett. Noct.* f. 686.
Cucullia Chrysanthemi, *Treit. Schmett.* v. 114.

a—d. England. From Mr. Stephens' collection.
e, f. England.
g—i. Europe. From M. Becker's collection.
j. Europe.
k. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.
l. Trenton Falls, New York. Presented by E. Doubleday, Esq.

27. Cucullia Calendulæ.

C. Chamomillæ *simillima, coloribus dilutioribus.*

Cucullia Calendulæ, *Dahl. MSS. Guen. Noct.* ii. 143, 877.
Cucullia Chamomillæ, var. *Treit. Schmett. Suppl.* 127. *Boisd. Ind. Méth.* 154, 1244. *Guen. Noct.* 246.

Sicily.

28. Cucullia Wredowii.

C. Chamomillæ *affinis*.

Cucullia Wredowii, *Costa*, *Faun.* 23, pl. 14. *Guen. Noct.* ii. 143, 878.

Naples.

29. Cucullia Santolinæ.

Cana; abdomen sordide cinerascens; alæ anticæ fuscæ subcinereo albidoque variæ, venis nigricantibus, lineolis duabus ad marginem nigris, macula subcentrali albida; posticæ fuscescentes, ciliis albis.

Cucullia Santolinæ, *Ramb. Ann. Soc. Ent. Fr.* iii. 387, pl. 8, f. 4, 4 a. *Boisd. Ind. Méth.* 153, 1230. *Dup. Suppl.* iii. 418, pl. 37. *Herr.-Schæff. Schmett. Eur.* ii. 315, 403, pl. 39, f. 198. *Guen. Noct.* ii. 144, 879.

South France. Corsica.

a—c. Europe. From M. Becker's collection.

30. Cucullia lucifuga.

Cinerea; abdomen fusco-cinerascens; alæ anticæ lineis angulosis strigisque exterioribus fuscis, maculis obsoletis; posticæ cinerascentes, margine lato fusco, ciliis albis.

———— ————, *Roës. Ins.* i. 2, pl. 25, f. 1, 2, 4, 5; iii. pl. 71, f. 10. *Engr. Pap. d'Eur.* vi. pl. 248, f. 369, a.

Noctua lucifuga, *Wien. Verz. Schmett.* 312, 11. *Hübn. Eur. Schmett. Noct.* pl. 54, f. 262.

Cucullia lucifuga, *Ramb. Ann. Soc. Ent. Fr.* iii. 179. *Boisd. Ind. Méth.* 154, 1246. *Herr.-Schæff. Schmett. Eur.* ii. 314, 402. *Guen. Noct.* ii. 144, 880.

Cucullia lucifuga? *Meig. Syst. Besch.* iii. 200, 13, pl. 112, f. 6.

Alps.

a. Europe. From M. Becker's collection.

31. Cucullia Lactucæ.

Cinereo-cana; antennæ fuscæ, basi albæ; alæ anticæ lineolis lanceolatis liturisque marginalibus nigris; posticæ cinereæ. Fœm.—*Alæ posticæ margine lato fusco.*

——— ———, *Roës. Ins.* i. pl. 42, f. 1—5. *Engr. Pap. d'Eur.* vi. pl. 248, f. 386, a—d.

Noctua Lactucæ, *Wien. Verz.* 74, 7. *Fabr. Mant. Ins.* ii. 181, 295; *Ent. Syst.* iii. 2, 122, 367. *Esp. Schmett.* iv. pl. 137, f. 4—6. *Bork. Eur. Schmett.* iv. 297, 125. *Hübn. Eur. Schmett. Noct.* pl. 54, f. 264. *Dup. Hist. Nat. Lép. Fr.* vii. 424, pl. 126, f. 2.

Phalæna-Noctua Lactucæ, *Gmel. ed. Syst. Nat.* i. 5, 2567, 1141.

Cucullia Lactucæ, *Treit. Schmett.* v. 109, 11. *Meig. Handb.* 180, 84; *Syst. Besch.* iii. 200, 12, pl. 112, f. 2. *Ramb. Ann. Soc. Ent. Fr.* iii. 182. *Boisd. Ind. Méth.* 154, 1246. *Herr.-Schæff. Schmett. Eur.* ii. 317, 410. *Guen. Noct.* ii. 144, 880.

Callænia Lactucæ, *Hübn. Verz. Schmett.* 246, 2446.

a—d. Europe. From M. Becker's collection.

32. Cucullia pustulata.

Cinerea; thorax lineis transversis obscurioribus, alæ anticæ lineatæ, vittis duabus incompletis pallidioribus, strigis obliquis costalibus obscurioribus, guttis marginalibus nigris, orbiculari obsoleta, reniformi distincta minima; posticæ pallidæ, margine latissimo nigro-cinereo, ciliis albidis.

Cucullia pustulata, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842, 3; *Faun. Volg-Ural.* 302. *Herr.-Schæff. Schmett. Eur.* ii. 316, 408, pl. 37, f. 189. *Guen. Noct.* ii. 145, 882.

Ural Region.

33. Cucullia Campanulæ.

Cinerea; thorax lineis transversis obscurioribus, alæ anticæ lineatæ, vittis subobsoletis pallidioribus, punctis marginalibus nigricantibus, strigis obliquis costalibus obscurioribus, 1a remota, 2a 3aque approximatis, orbiculari et reniformi obsoletis; posticæ pallidæ, litura discali margineque latissimo nigro-cinereis.

Noctua Campanulæ, *Frey. Beit.* i. 64, pl. 35.

Cucullia Campanulæ, *Guen. Noct.* ii. 146, 883.

Cucullia Campanulæ? *Eversm. Faun. Volg-Ural.* 301. *Herr.-Schæff. Schmett. Eur.* ii. 316, 407, pl. 37, f. 188.

Bavaria. Ural Region.

34. Cucullia præcana.

Pallide cinerea; alæ anticæ albido nebulosæ, guttis discalibus, strigis exterioribus punctisque marginalibus nigris; posticæ fuscescentes, margine obscuriore, ciliis albis.

Cucullia præcana, *Eversm, Bull. Soc. Imp. Nat. Mosc.* 1843, No. 3; *Faun. Volg-Ural.* 304. *Herr.-Schæff. Schmett. Eur.* ii. 316, 409, pl. 99, f. 509. *Guen. Noct.* ii. 146, 884.

Ural Region.

35. Cucullia umbratica.

Cana; thorax fasciis pallide fuscescentibus unaque antica nigra; abdomen fusco vittatum; alæ anticæ substrigatæ, lineis incompletis angulosis strigisque exterioribus guttisque paucis discalibus nigricantibus; posticæ maris *albæ venis margineque tenui fuscis,* fœminæ *fuscis basi pallidioribus.*

———, *Roës. Ins.* i. pl. 25, f. 3, 6. *Reaum. Ins.* i. pl. 43, f. 9, 11. *Schæff. Ins.* iii. pl. 212. *Engr. Pap. d'Eur.* 369, c—e.

Phalæna-Noctua umbratica, *Linn. Syst. Nat.* 849, 150; *Faun. Suec.* 1184; *Gmel. ed. Syst. Nat.* i. 5, 2564, 150.

Noctua umbratica, *Wien. Verz.* 74, 8. *Fabr. Sp. Ins.* ii. 240, 146; *Mant. Ins.* ii. 182, 296; *Ent. Syst.* iii. 2, 122, 368. *Sepp, Ins.* iii. pl. 25, f. 7. *Esp. Schmett.* iv. pl. 137, f. 1—3. *Bork. Eur. Schmett.* iv. 292, 123. *Hübn. Eur. Schmett. Noct.* pl. 54, f. 263. *Dup. Hist. Nat. Lép. Fr.* vii. 421, pl. 26, f. 1. *Haw. Lep. Brit.* 14. *Donov. Brit. Ins.* pl. 262, f. 2.

Noctua Lactucæ, *Hübn. Noct.* pl. 54, f. 264. *Haw. Lep. Brit.* 17?

Noctua lucifuga, *Esp. Schmett.* iv. pl. 178, f. 6. *Bork. Eur. Schmett.* iv. 296 (larv.).

Cucullia umbratica, *Treit. Schmett.* v. 105, 10. *Meig. Handb.* 179, 83; *Syst. Besch.* iii. 199, 11, pl. 112, f. 1. *Ramb. Ann. Soc. Ent. Fr.* iii. 182. *Steph. Ill. Brit. Ent. Haust.* iii. 87. *Boisd. Ind. Méth.* 154, 1243. *Herr.-Schæff. Schmett. Eur.* ii. 317, 411. *Guen. Noct.* ii. 146, 885.

Callænia umbratica, *Hübn. Verz. Schmett.* 246, 2445.

Cucullia Lactucæ, *Treit. Schmett.* v. 110. *Steph. Ill. Brit. Ent. Haust.* iii. 88.

Cucullia Tanaceti, *Steph. Ill.* iii. 88.

a—k. England. From Mr. Stephens' collection.
l—p. England.
q, r. Europe. From M. Becker's collection.

36. Cucullia biornata.

Pallide cinerea, thorax lineis transversis obscurioribus, postice subtestaceus; alæ anticæ lineatæ, vittis duabus subtestaceis, maculis obsoletis, punctis marginalibus nigris; posticæ albidæ, margine lato cinereo, ciliis albis.

Noctua biornata, *Freyer, Neue Beit.* iv. pl. 352, f. 4; *Ent. Zeit. Stett.* ii. 109.
Cucullia biornata, *Eversm. Faun. Volg-Ural.* 300; *Herr.-Schæff. Schmett. Eur. Noct.* ii. 317, 413, pl. 89, f. 197. *Guen. Noct.* ii. 147, 886.

Sarepta.

37. Cucullia Balsamitæ.

Cana; alæ anticæ lineis transversis distinctis obscurioribus; abdomen cinerascens; alæ anticæ lineis lanceolatis obscurioribus, linea basali strigaque discali luteis, maculis obsoletis; posticæ cinerascentes, margine obscuriore, ciliis albis.

Noctua Balsamitæ, *Frey. Neue Beit.* iv. pl. 358; *Ent. Zeit. Stett.* ii. 109.
Cucullia Balsamitæ, *Boisd. Ind. Méth.* 154, 1242. *Eversm. Faun. Volg-Ural.* 303. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 77, pl. 57. *Herr.-Schæff. Schmett. Eur.* ii. 317, 412, pl. 39, f. 199. *Guen. Noct.* ii. 147, 887.

38. Cucullia Virgaureæ.

Cinerea; thorax subfasciatus; abdomen testaceo-cinerascens, cristis nigris; alæ anticæ cervino pallido ex parte tinctæ, lineis subobsoletis fuscescentibus, striga apud angulum interiorem fusca, lunulis marginalibus nigricantibus; posticæ subcinereæ, margine fuscescente, ciliis albis.

Cucullia Virgaureæ, *Boisd. Ind. Méth.* 154, 1247. *Guen. Noct.* ii. 148, 888.
Cucullia Dracunculi, *Eversm. Faun. Volg-Ural.* 304. *Herr.-Schæff. Schmett. Eur.* ii. 314, 400, pl. 38, f. 194.

South Russia.

39. Cucullia Dracunculi.

Cinerea; thorax lineis transversis obscurioribus; abdomen cinerascens; alæ anticæ lineis lanceolatis obscurioribus, apud costam fuscescentes; posticæ cinerascentes, margine fuscescente.

Noctua Dracunculi, *Hubn. Eur. Schmett. Noct.* f. 586. *Dup. Hist. Nat. Lép. Fr.* vii. 409, pl. 125.
Euderacea Dracunculi. *Hübn. Verz. Schmett.* 245, 2439.
Cucullia Dracunculi, *Treit. Schmett.* v. 104. *Boisd. Ind. Méth.* 154, 1241. *Guen. Noct.* ii. 149, 889.
Cucullia incana, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842.

Ural Region.

a, *b*. Europe. From M. Becker's collection.

40. Cucullia mixta.

Obscure cinerea, rufescente conspersa; thorax fasciis obscurioribus; alæ anticæ triente basali pallido vittata.

Noctua mixta, *Frey. Neue Beit.* iv. pl. 352, f. 23; *Ent. Zeit. Stett.* ii. 108.
Cucullia Dracunculi??

Group 3.

Color omnino albus.

Colour wholly white.

41. Cucullia lactea.

Alba; abdomen albidum; alæ anticæ fuscescente subobsolete conspersæ; posticæ apud marginem subconspurcatæ, ciliis albis.

Noctua lactea, *Fabr. Mant. Ins.* ii. 182, 297; *Ent. Syst.* iii. 2, 123, 369. *Esp. Schmett.* iv. pl. 190, f. 1. *Hübn. Eur. Schmett. Noct.* pl. 95, f. 448. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 127, f. 3.
Phalæna-Noctua lactea, *Gmel. ed. Syst. Nat.* i. 5, 2565, 1133.
Empusa lactea, *Hübn. Verz. Schmett.* 247, 2452.
Cucullia lactea, *Treit. Schmett.* v. 99. *Meig. Syst. Besch.* iii. 202, 16, pl. 111, f. 13. *Boisd. Ind. Méth.* 154, 1239. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 400, pl. 36. *Eversm. Faun. Volg-Ural.* 299. *Herr.-Schæff. Schmett. Eur.* ii. 317, 414. *Guen. Noct.* ii. 148, 890.

South Russia.

a, *b*. Europe. From M. Becker's collection.

North America.

Group 1.

Like the second European group.

42. Cucullia Asteroides.

Cinerea; thorax lineis et abdomen vitta nigricantibus; alæ anticæ apud costam fuscescentes, margine interiore strigisque duabus apud angulum interiorem fuscis; posticæ albæ, margine lato fusco.

Cucullia Asteroides, *Guen. Noct.* ii. 133, 858.

a, *b*. New York. Presented by E. Doubleday, Esq.

43. Cucullia postera.

Cinerea; thorax lineis transversis obscurioribus; alæ anticæ lineatæ, apud costam fuscescentes, maculis albido marginatis, lituris duabus apud angulum interiorem nigris albidisque; posticæ subcinereæ, margine lato fusco, ciliis albis.

Cucullia postera, *Guen. Noct.* ii. 133, 859.

a. Northern United States. Presented by E. Doubleday, Esq.

44. Cucullia florea.

Cinerea; thorax lineis transversis fuscis; alæ anticæ lineatæ, costa margine interiore guttisque quadratis discalibus fuscis, striga apud angulum interiorem nigra; posticæ pallidæ, margine fuscescente.

Cucullia florea, *Guen. Noct.* ii. 134, 860.

a. New York. Presented by E. Doubleday, Esq.

Africa.

45. Cucullia Asylas.

Albida; alæ anticæ pallidissime cervinæ, nigro subconspersæ, vitta discali alba; posticæ albæ, lineis pallidissime cervinis.

Phalæna Asylas, *Cram. Pap. Exot.* ii. 62, pl. 137, f. C.

Cape.

Country unknown.

46. Cucullia clausa.

Mas. *Cinerea; caput et thorax anticus fusca; abdomen alas posticas fere dimidio superans, apice fasciculatum; alæ anticæ perangustæ, fusco substrigatæ, lineis transversis angulosis guttisque nonnullis discalibus fuscis, macula nigricante subquadrata inter orbicularem et reniformem pallidas indistinctas, guttis marginalibus obscure fuscis; posticæ cinereæ, margine fuscescente, ciliis pallidis.*

Male. Nearly allied to *C. Absinthii.* Cinereous. Head and fore part of the thorax brown. Abdomen extending for nearly half its length beyond the hind wings, tufted at the tip. Fore wings very narrow, slightly streaked with pale brown; transverse lines angulose, brown; some brown dots about the orbicular and reniform spots, which are pale and indistinct, and have a blackish subquadrate spot between them; a row of dark brown marginal dots. Hind wings cinereous, with brownish borders, and with pale ciliæ. Length of the body 6 lines; of the wings 12 lines.

a. ———?

Genus 14. ARGYRITIS.

Corpus sat validum. Proboscis mediocriter longa. Palpi porrecti, caput paullo superantes; articulus 3us longi-conicus, 2i dimidio æqualis. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas plus minusve superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ anticæ argenteæ, lanceolatæ, plus minusve angustæ, viridi sæpissime variæ.

Argyritis, *Hübn. Verz. Schmett.* 247.
Cucullia, p., *Ochs.; Treit.; Boisd.; Dup.; Steph.; Curt.; Guen.*

Body moderately stout. Proboscis moderately long. Palpi porrect, extending a little beyond the head; third joint elongate-conical, full half the length of the second. Antennæ simple, more than half the length of the body. Abdomen extending more or less beyond the hind wings. Legs moderately stout; hind tibiæ with rather long spurs. Fore wings lanceolate, silvery, generally varied with green, more or less narrow.

Europe.

A. Alæ anticæ immaculatæ. - - - splendida, *Cram.*
B. Alæ anticæ olivaceæ, vitta argentea. - - argentina, *Fabr.*
C. Alæ anticæ virides, fasciis argenteis. - Artemisiæ, *Cram.*
D. Alæ anticæ argenteæ, olivaceo variæ. - magnifica, *Frey.*

1. Argyritis splendida.

Alba; thorax cinereo fasciatus; abdomen subtestaceum; alæ argenteæ, ciliis subtestaceis; posticæ margine lato cinerascente.

Phalæna-Pyralis splendida, *Cram. Pap. Exot.* iv. 242, pl. 400, f. F.

Cucullia splendida, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 428, pl. 38. *Herr.-Schæff. Schmett. Eur.* ii. 318, 415, pl. 38, f. 190. *Guen. Noct.* ii. 150, 891.

Cucullia argyrea, *Kind. Boisd. Ind. Méth.* 154, 1237.

Noctua argyrea, *Frey. Beit.* iv. pl. 304, f. 2.

South Russia.

a. Europe. From M. Becker's collection.

2. Argyritis argentina.

Alba; abdomen subargenteum; alæ anticæ olivaceæ, guttis discalibus fasciaque perobliqua exteriore nigricantibus, vitta lata antica argentea apice truncata.

Noctua argentina, *Fabr. Mant. Ins.* ii. 162, 185; *Ent. Syst.* iii. 2, 80, 232. *Bork. Eur. Schmett.* iv. 796, 365. *Hübn. Eur. Schmett. Noct.* pl. 119, f. 553. *Dup. Hist. Nat. Lép. Fr.* vii. 442, pl. 127, f. 5. *Frey. Beitr.* iv. pl. 298.

Argyritis argentea, *Hübn. Verz. Schmett.* 247, 2454.

Cucullia argentina, *Treit. Schmett.* v. 98, 6. *Meig. Syst. Beech.* iii. 201, 15, pl. 112, f. 9. *Boisd. Ind. Méth.* 144, 1238. *Eversm. Faun. Volg-Ural.* 298. *Herr.-Schæff. Schmett. Eur.* ii. 318, 416. *Guen. Noct.* ii. 150, 893.

South Russia.

a, b. Europe. From M. Becker's collection.

3. Argyritis magnifica.

Alba; caput, palpi apice, thorax anticus et cristarum apices olivaceo-viridia; alæ anticæ argenteæ, costa macula basali fasciisque duabus postice connexis guttisque marginalibus olivaceo-viridibus, albo ex parte interlineatis.

Cucullia scopula, *Fischer de Waldheim, Bull. Soc. Imp. Nat. Mosc.* 1839, 1, 115, pl. 4, f. 1.
Noctua magnifica, *Frey. Beitr.* iv. pl. 304.
Cucullia magnifica, *Eversm. Faun. Volg-Ural.* 297. *Boisd. Ind. Méth.* 153, 1236. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 430, pl. 38. *Herr.-Schæff. Schmett. Eur. Noct.* ii. 308, 384, pl. 38, f. 191. *Guen. Noct.* ii. 151, 894.

South Russia.

a. Europe. From M. Becker's collection.

4. Argyritis Artemisiæ.

Alba; alæ anticæ virides fasciis obliquis interruptis argenteis; posticæ cinereo marginatæ.

——— ———, *Engr. Pap. d'Eur.* 360, a—h.
Noctua Artemisiæ, *Wien. Verz.* 312, 9. *Fabr. Mant. Ins.* ii. 162, 180; *Ent. Syst.* iii. 2, 78, 227. *Knoch, Beitr.* i. 45, pl. 3, f. 1. *Bork. Eur. Schmett.* iv. 287, 121. *Hübn. Eur. Schmett. Noct.* pl. 53, f. 259. *Dup. Hist. Nat. Lép. Fr.* vii. 439, pl. 127, f. 4. *Frey. Beitr.* iv. pl. 322.
Phalæna-Noctua Artemisia, *Cram. Pap. Exot.* iv. 223, pl. 396, f. G. *Gmel. ed. Syst. Nat.* i. 5, 2556, 1109.
Noctua argentea, *Fabr. Sp. Ins.* ii. *App.* 507. *Knoch, Beitr.* i. 45, pl. 3, f. 2. *Esp. Schmett.* iv. pl. 109, f. 6—9.
Phalæna-Noctua argentea, *Cram. Pap. Exot.* iv. 242, pl. 400.
Phalæna argentea, *Herbst, Fuessl. Arch.* i. *View.* 78.
Cucullia Artemisiæ, *Treit. Schmett.* v. 95, 5. *Meig. Handb.* 177. 77, pl. 13, f. 5; *Syst. Besch.* iii. 201, 14, pl. 112, f. 8. *Steph. Ill. Brit. Ent. Haust.* iii. 91. *Boisd. Ind. Méth.* 153, 1235. *Herr.-Schæff. Schmett. Eur.* ii. 318, 417. *Guen. Noct.* ii. 151, 895.
Argyritis Artemisiæ, *Hübn. Verz. Schmett.* 247, 2453.

a. England?
b—f. Europe. From M. Becker's collection.
g. Europe. From Mr. Milne's collection.
h. Germany.

South America.

5. Argyritis argyrina.

Alba; thorax cinereo conspersus; alæ anticæ angustæ lanceolatæ integræ vitta lata antica, linea submarginali fasciaque lata postica argenteis; posticæ opalino albæ, margine nigricante.

Cucullia argyrina, *Guen. Noct.* ii. 150, 892.

Monte Video.

Africa.

6. Argyritis Filia.

Rufo-testacea; abdomen album; alæ anticæ rubiginosæ, apud marginem exteriorem testaceæ? disco argenteæ, striga basali plagaque apud angulum interiorem albis; posticæ albæ cinereo latissime marginatæ.

Phalæna-Noctua Filia, *Cram. Pap. Exot.* iii. 128, pl. 264, f. D.
Argyritis Filia, *Hübn. Verz. Schmett.* 247, 2455.

Cape.

Genus 15. CRAMBODES.

Corpus gracile. Proboscis brevis. Palpi porrecti, graciles, subnudi, caput longe superantes; articulus 3us conicus, 2i quadrante non longior. Antennæ serratæ, subciliatæ. Abdomen alas posticas vix superans. Pedes graciles; tibiæ posticæ calcaribus longis. Alæ anticæ sat angustæ, apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo vix denticulato.

Crambodes, *Guen. Noct.* ii. 152.

Male. Body slender. Proboscis short. Palpi porrect, slender, almost bare, extending much beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ serrated, minutely ciliated. Abdomen hardly extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Fore wings rather narrow, straight in front, rounded at the tips, moderately oblique and hardly denticulated along the exterior border.

1. Crambodes Talidiformis.

Mas. *Pallidissime cervina; alæ anticæ fascia media diffusa costaque fuscis, strigis interioribus lanceolatis, linea media e punctis guttisque marginalibus nigris, reniformi transversa angusta nigricante marginata; posticæ albidæ, guttis marginalibus fuscis.*

Crambodes Talidiformis, *Guen. Noct.* ii. 152, 896.

North and South America.

a. United States. Presented by E. Doubleday, Esq.

Genus 16. EPIMECIA.

Corpus gracile. Proboscis brevis. Palpi validi, porrecti, pilosi, caput sat superantes; articulus 3us longi-conicus, 2i trientis non longior. Antennæ simplices, graciles, corporis dimidio longiores. Abdomen alas posticas perpaullo superans. Pedes graciles; tibiæ posticæ calcaribus longis. Alæ anticæ sat angustæ, apud costam rectæ, apice subrotundatæ, margine exteriore sat obliquo.

Epimecia, *Guen. Ann. Soc. Ent. Fr.* viii. 514; *Noct.* ii. 153.
Cleophana, p., *Boisd.*
Caradrina, p., *Treit.*

Body slender. Proboscis short. Palpi stout, porrect, pilose, extending some distance beyond the head; third joint elongate-conical, not more than one-third of the length of the second. Antennæ simple, slender, rather more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Fore wings rather narrow, straight in front, somewhat rounded at the tips, rather oblique along the exterior border.

1. Epimecia ustulata.

Pallide cinerascens; abdomen albido-canescens; alæ anticæ disco ex parte costa margineque exteriore obscurioribus, nigro conspersæ, guttis duabus discalibus albis; posticæ albido-canescentes.

Cleophana ustulata, *Boisd. Ramb. Grasl. Chem.* pl. 22; *Ind. Meth.* 151, 1212.

Epimecia ustulata, *Guen. Ind.* 246; *Noct.* ii. 154, 897. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 395, pl. 35.
Noctua ustulata, *Geyer*, *Schmett.* f. 857. *Frey. Beitr.* ii. pl. 148, f. 1.
Caradrina lurida, *Treit. Schmett. Suppl.* x. 81.
Epimecia lurida, *Herr.-Schæff. Schmett. Eur.* ii. 239, 175, pl. 86, f. 442.

South France. Hungary.

a, *b*. Europe. From M. Becker's collection.

Genus 17. OMIA.

Corpus pilosum, vix robustum. Proboscis longiuscula. Palpi porrecti, pilosi, caput paullo superantes; articulus 3us minimus. Antennæ simplices, corporis dimidio multo longiores. Abdomen alas posticas paullo superans. Pedes mediocriter validi; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter latæ, apud costam rectæ, apice rotundatæ, margine exteriore integro mediocriter obliquo.

Omia et Apaustis, *Hübn. Verz. Schmett.* 244, 258.
Omia, *Guen. Noct.* ii. 154.
Cleophana, *Treit.*; *Boisd.*
Cleophana et Heliodes, *Guen. Ess. Dup.*
Heliothisa, p., *Meig. Syst. Besch.* iii. 228.

Body pilose, moderately stout. Proboscis rather long. Palpi pilose, porrect, extending a little beyond the head; third joint very minute. Antennæ simple, much more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Fore wings moderately broad, straight in front, rounded at the tips, entire and moderately oblique along the exterior border.

1. Omia rupicola.

Nigro-fusca, pilis albis varia; alæ anticæ fasciis angulosis nigris, orbiculari et reniformi plus minusve albis, ciliis albo strigatis; posticæ albæ, margine lato nigro-fusco.

Noctua rupicola, *Wien. Verz.* 90, 9. *Esp. Schmett.* iv. pl. 192, f. 1. *Hübn. Beitr.* pl. 2, f. . *Dup. Hist. Nat. Lép. Fr.* vii. 205, pl. 118, f. F. *Frey. Beitr.* iv. pl. 330.
Cleophana rupicola, *Ochs. Schmett.* 77, 7. *Treit. Schmett.* v. 210, 6.

Anarta rupicola, *Boisd. Ind. Méth.* 162, 1299. *Herr.-Schaff. Schmett. Eur. Noct.* ii. pl. 42, f. 213, 214.
Noctua palliata, *Fabr. Mant.* 73.
Noctua pallium, *Bork. Eur. Schmett.* iv. 92, 36.
Noctua heliophila, *Hübn. Eur. Schmett. Noct.* pl. 64, f. 317.
Apaustis heliophila, *Hübn. Verz. Schmett.* 258, 2543.
Heliothisa rupicola, *Meig. Syst. Besch.* iii. 228, 10, pl. 119, f. 5, a, b.

Hungary.

a. Lapland. Presented by J. R. Crowe, Esq.
b. Europe.

2. Omia Cymbalariæ.

Cinerea; thorax fusco fasciatus; alæ anticæ fuscæ, fasciis duabus incompletis canis, venis nigris, ciliis albo strigatis; posticæ nigricantes, ciliis albis.

Noctua Cymbalariæ, *Hübn. Eur. Schmett. Noct.* pl. 92, f. 432. *Dup. Hist. Nat. Lép. Fr.* vii. 267, pl. 116, f. 7.
Cleophana Cymbalariæ, *Treit. Schmett.* v. 272, 13. *Boisd. Ind. Méth.* 151, 1214.
Omia Cymbalariæ, *Hübn. Verz. Schmett.* 244, 2433. *Guen. Noct.* ii. 156, 899.
Heliothisa Cymbalariæ, *Meig. Syst. Besch.* iii. 229, 11, pl. 120, f. 6.

Valais, South France.

a. Pyrenees. Presented by the Entomological Club.

3. Omia cyclopea.

Alæ anticæ cinereo-fuscæ, ad basin obscuriores, in medio pallidiores, strigis duabus transversis subsinuatis albicantibus anguste nigro-cinctis, macula reniformi magna fere triangulari albo-cincta, orbiculari nulla, fimbria variegata; posticæ nigro-fuscæ intus obscuriores; prothorax quadri mucronatus.

Cleophanana cyclopea, *Graslin, Ann. Soc. Ent. Fr.* xiv. 570, pl. 17, B, f. 7. *Herr.-Schaff. Eur. Schmett.* ii. 297, 356. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 376, pl. 34, f. 5. *Boisd. Ind. Méth.* 151, 1213.
Omia cyclopea, *Guen. Noct.* ii. 156, 900.

South Spain. Corsica.

Genus 18. CLEOPHANA.

Corpus robustum, pilosum. Proboscis brevis. Palpi oblique ascendentes; articulus 3us gracilis, cylindricus, 2i triente non longior. Abdomen alas posticas plus minusve superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ mediocriter latæ, apud costam rectæ, apice angulatæ, margine exteriore subconvexo mediocriter obliquo.

Cleophana, p., *Boisd.*; *Treit.*; *Guen.*; *Dup.*; *Herr.-Schæff.*
Omia, p., *Hübn. Verz. Schmett.* 244.
Xylina, p., *Meig.*

Body stout, pilose. Proboscis short. Palpi obliquely ascending; third joint slender, cylindrical, not more than one-third of the length of the second. Antennæ more than half the length of the body. Abdomen extending more or less beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad, straight in front, angular at the tips, slightly convex and moderately oblique along the exterior border. *Male.*—Antennæ minutely serrated.

1. Cleophana Yvanii.

Alæ anticæ cinereo fusco fulvoque variæ, lineolis duabus nigro venosis angulatisque transversis; posticæ albido-flavæ, margine fusco.

Xylina Yvanii, *Donzel, MSS. Duponch. Ann. Soc. Ent. Fr.* ii. 257, pl. 9; *Hist. Nat. Lép. Fr. Suppl.* iii. 389, pl. 35, f. 3.
Cleophana Yvanii, *Boisd. Ind. Méth.* 151, 1215. *Guen. Noct.* ii. 158, 901. *Herr.-Schæff. Eur. Schmett.* ii. 297, 357.
Noctua Yvanii, *Geyer, Schmett.* f. 838.

Digne.

2. Cleophana Anarrhini.

Fuscescens; thoraxe fasciis angustis; abdominisque segmentis marginibus posticis albidis; alæ anticæ ocello discali strigisque nonnullis transversis albis, lineis duabus transversis undulatis duplicatis strigisque exterioribus lanceolatis nigris, ciliis inter venas albis; posticæ nigro-fuscæ, disco ex parte albido, ciliis albidis, fusco variis.

Cleophana Anarrhini, *Boisd. Ind. Méth.* 151, 1217. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 387, pl. 35, f. 2. *Herr.-Schæff. Schmett. Eur.* ii. 98, 36, pl. 32, f. 157. *Guen. Noct.* ii. 158, 902.

Provence.

a, *b*. Europe. From M. Becker's collection.

3. Cleophana Dejeanii.

Albida, fusco varia; alæ anticæ nigro lineatæ, fasciis duabus aureo-fuscis, lineis duabus intermediis flexuosis lineisque marginalibus albis, ciliis alternis fuscis; posticæ fuscescentes.

Noctua Dejeanii, *Dup. Hist. Nat. Lép. Fr.* vii. 238, pl. 115, f. 2.
Cleophana Dejeanii, *Dup. Suppl.* iii. 386, pl. 35, f. 1. *Boisd. Ind. Méth.* 151, 1216. *Herr.-Schæff. Eur. Schmett.* ii. 296, 355, pl. 32, f. 156. *Guen. Noct.* ii. 159, 903.
Xylina Dejeanii, *Boisd. Ind.* 88. *Meig. Syst. Besch.* iii. 193, pl. 111, f. 6.

South France. Spain.

a—*d* Europe. From M. Becker's collection.

4. Cleophana penicillata.

Cinerea, fusco varia; alæ anticæ strigis ambabus percurrentibus niveis utrinque acute nigro-cinctis.

Cleophana Baetica, *Ramb. Faun. Andal.* ii. pl. 184.
Cleophana penicillata, *Boisd. Ind. Méth.* 151, 1218. *Herr.-Schæff. Eur. Schmett.* ii. 298, 360. *Guen. Noct.* ii. 159, 904,
Cleophana Chænorrhini? *Dup. Hist. Nat. Lép. Fr. Suppl.* 379, pl. 34, f. 6.

Sardinia. Andalusia.

5. Cleophana serrata.

Alæ anticæ fusco cinereoque variæ, apice albo nigroque radiatæ, strigis duabus albidis approximatis transversis, maculis ordinariis nigris albido inductis.

Cleophana serrata, *Treit. Schmett. Suppl.* x. 121. *Feisthamel, Ann. Soc. Ent. Fr.* vi. 299, pl. 12, f. 2. *Herr.-Schæff. Eur. Schmett.* ii. 298, 361. *Guen. Noct.* ii. 160, 905.
Noctua serrata, *Frey. Beitr.* iii. pl. 256, f. 1.

South Spain. Sicily.

6. Cleophana Arctata.

Fusco-cinerea; caput, thoracis margo anticus vittæque duæ obliquæ pallide cinerascentia; abdomen cinerascens linea interrupta nigra; alæ anticæ apud marginem exteriorem albæ, lineis transversis interruptis interioribus strigisque exterioribus nigris; posticæ fuscæ, basi albidæ, ciliis albis fusco guttatis.

Noctua serrata, *Geyer*, *Schmett.* f. 871.
Cleophana serrata, *Guen. Ind.* 246. *Boisd. Ind. Méth.* 152, 1221. *Feisth. Ann. Soc. Ent. Fr.* 1837, vi. 299, pl. 12, f. 2. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 426, pl. 37.
Cleophana arctata, *Guen. Noct.* ii. 161, 906.

South Spain.

7. Cleophana Antirrhini.

Cervino-fuscescens; thorax fasciis albidis; abdominis segmenta albo marginata; alæ anticæ cinereo variæ, fasciis duabus angulatis nigricantibus albido marginatis, reniformi intermedia subrotunda albido marginata, fascia interrupta albida strigisque nigris exterioribus, ciliis albo strigatis; posticæ fuscæ, fascia interrupta sordide albida, ciliis albis basi cervino notatis.

——— ———, *Engr. Pap. d'Eur.* 347, e, f.
Noctua Antirrhini, *Hübn. Eur. Schmett. Noct.* pl. 52, f. 253. *Dup. Hist. Nat. Lép. Fr.* vii. 264, pl. 110, f. 6. *Frey. Beitr.* ii. pl. 172.
Cleophana Antirrhini, *Treit. Schmett.* v. 75, 31; *Suppl.* 120. *Boisd. Ind. Méth.* 151, 1219. *Herr.-Schæff. Eur. Schmett.* ii. 29[2], 362. *Guen. Noct.* ii. 161, 907.
Omia Antirrhinii, *Hübn. Verz. Schmett.* 244, 2434.
Xylina Antirrhinii, *Meig. Syst. Besch.* iii. 192, 21, pl. 111, f. 2.

South France. Austria. Hungary.

a, *b*. Europe. From M. Becker's collection.

Genus 19. CALOPHASIA.

Corpus robustum. Proboscis mediocriter longa. Palpi suberecti; articulus 3us conicus, 2i quadrante brevior. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ anticæ apud costam rectæ, apice rectangulatæ, margine exteriore subobliquo.

Calophasia, *Steph. Ill. Brit. Ent. Haust.* ii. 61. *Guen. Noct.* ii. 162.
Omia, p., *Hübn. Verz. Schmett.*
Taracha, *Hübn. Verz. Schmett.* 261. *Herr.-Schæff.*

Body stout. Proboscis moderately long. Palpi ascending, almost vertical; third joint conical, less than one-fourth of the length of the second. Antennæ simple, more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Fore wings straight in front, rectangular at the tips, slightly oblique along the exterior border.

A. Alæ anticæ strigatæ.
  A. Alæ posticæ cinerascentes.
    A. Orbicularis et reniformis conspicuæ. Linariæ, *Wien. Verz.*
    B. Orbicularis et reniformis indistinctæ. - platyptera, *Esp.*
  B. Alæ posticæ nigricantes. - - Orontii, *Herr.-Schæff.*
  C. Alæ posticæ albæ. - - - - - - olbiena, *Guen.*
B. Alæ anticæ non strigatæ. - - - - opalina, *Esp.*

1. Calophasia Linariæ.

Canescens; thorax fasciis fuscescentibus; abdomen cinerascens; alæ anticæ fasciis duabus diffusis connexis nigro lineatis fuscescentibus, strigis exterioribus nigris, orbiculari oblonga angusta, reniformi alba, ciliis fuscis albo strigatis; posticæ cinerascentes, margine fusco, ciliis albis.

——— ———, *Réaum. Ins.* i. 356, pl. 37. *Deg. Ins.* ii. 430, pl. 8. *Engr. Pap. d'Eur.* 347, a—d.

Noctua Linariæ, *Wien. Verz.* 73, 6. *Fabr. Mant. Ins.* ii. 167, 219. *Ent. Syst.* iii. 2, 92, 274. *Esp. Schmett.* iv. pl. 121, f. 4, 5. *Bork. Eur. Schmett.* iv. 314, 132. *Hübn. Eur. Schmett. Noct.* pl. 52, f. 252. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 110, f. 6. *Frey. Beitr.* ii. 171.

Phalæna-Noctua Linariæ, *Gmel. ed. Syst. Nat.* i. 5, 2564, 1132.
Omia Linariæ, *Hübn. Verz. Schmett.* 245, 2435.
Cleophana Linariæ, *Treit. Schmett.* v. 77, 32. *Boisd. Ind. Méth.* 152, 1220. *Herr.-Schæff.-Eur. Schmett.* ii. 298, 359.
Xylina Linariæ, *Meig. Handb.* 176, 73; *Syst. Beschr.* iii. 191, 20, pl. 111, f. 4.
Calophasia Linariæ, *Steph. Ill. Brit. Ent. Haust.* ii. 94. *Guen. Noct.* ii. 163, 908.

a. England. From Mr. Stephens' collection.
b, *c*. England.
d, *e*. Europe. From M. Becker's collection.
f—*h*. Europe.

2. Calophasia? Orontii.

Cana; thorax lineis transversis anticis vittaque nigricantibus; abdomen nigricans, pallido marginatum; alæ anticæ glauco-cinereæ, bari lineisque duabus transversis exterioribus albidis, fascia intermedia alba, guttis marginalibus nigris; posticæ nigricantes, fascia margineque pallidis.

Cleophana Orontii, *Herr.-Schæff. Schmett. Eur.* ii. pl. 36, f. 180, 181.
Calophasia? Orontii, *Guen. Noct.* ii. 164, 909.

3. Calophasia platyptera.

Cana; thorax fascia antica biarcuata nigra; abdomen cinereum; alæ anticæ vitta diffusa arcuata cinereo-fusca, lineis nonnullis strigisque lanceolatis marginalibus nigris; posticæ cinerascentes, margine fuscescente.

——— ———, *Engr. Pap. d'Eur.* 490.
Noctua platyptera, *Esp. Schmett.* iv. 396, pl. 130, f. 5. *Bork. Eur. Schmett.* iv. 133. *Dup. Hist. Nat. Lép. Fr.* vii. 337, pl. 120.
Noctua canterius, *Vill. Ent.* pl. 5, f. 11.
Noctua Tenera, *Hübn. Eur. Schmett. Noct.* f. 254.
Omia Tenera, *Hübn. Verz. Schmett.* 245, 2437.
Cleophana platyptera, *Treit. Schmett.* v. 71. *Boisd. Ind. Méth.* 152, 1222. *Herr.-Schæff. Eur. Schmett.* ii. 299, 363, pl. 32, f. 158.
Calophasia platyptera, *Guen. Noct.* ii. 164, 910.
South Europe.

a. Europe. From M. Becker's collection.

4. Calophasia olbiena.

Cinerea; thoracis discus nigricans; abdomen fuscescens; alæ anticæ nigro lineatæ, fasciis duabus fuscescentibus; posticæ albæ, fusco marginatæ.

Cleophana olbiena, *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 230, pl. 70, f. 3. *Herr.-Schæff. Schmett. Eur.* ii. pl. , f. 386.
Calophasia olbiena, *Guen. Noct.* ii. 164, 911.

Hyères, South France.

5. Calophasia opalina.

Candida; thorax postice nigro maculatus; alæ anticæ fascia repanda glauca, guttis costalibus maculisque marginalibus nigris; posticæ margine glauco-fusco.

Noctua opalina, *Esp. Schmett.* iv. pl. 182, f. 3. *Hübn. Eur. Schmett. Noct.* pl. 81, f. 376; f. 808, 809. *Frey. Beitr.* pl. 79. *Dup. Hist. Nat. Lép. Fr.* vii. 246, pl. 115, f. 3.
Xylina opalina, *Treit. Schmett.* v. 80, 33.
Heliothisa opalina, *Meig. Syst. Besch.* iii. 227, 8, pl. 114, f. 7; pl. 121, f. 2.
Cleophana opalina, *Boisd. Ind. Méth* 152, 1223.
Taracha opalina, *Hübn. Verz. Schmett.* 261, 2567. *Herr.-Schæff. Eur. Schmett.* ii. 295, 353.
Calophasia opalina, *Guen. Noct.* ii. 165, 912.
Noctua casta, *Scriba, Ins.* 212, pl. 17.

South France.

a—d. Europe. From M. Becker's collection.

Asia

6. Calophasia notabilis.

Alba; alæ anticæ maculis costalibus fasciaque lata maculisque marginalibus cinereis nigro notatis, ciliis cinereo maculatis; posticæ opalinæ, fuscescente interrupte marginatæ.

White. Antennæ black. Fore wings with gray black-marked spots along the costa, and with a broad irregular exterior gray black-marked band, which is hardly separate from a row of marginal spots of the same hue; ciliæ with gray spots. Hind wings somewhat iridescent, with interrupted pale brown borders. Length of the body 6 lines; of the wings 14 lines.

a, b. Punjaub. Presented by Gen. Hearsay.

Genus 20. SIGA.

Corpus sat validum. Antennæ longæ, graciles, simplices, corporis dimidio longiores. Proboscis longa. Palpi breves. *Mas.*—Abdomen alas posticas paullo superans. Alæ anticæ lanceolatæ, angustæ. *Fœm.*—Alæ anticæ latiores, apice obtusiores; posticæ abdomen fere superantes.

Siga, *Hübn. Verz. Schmett.* 195.

Body moderately stout. Antennæ of both sexes long, slender, bare, more than half the length of the body. Proboscis long. Palpi short. *Male.*—Abdomen extending a little beyond the hind wings. Fore wings lanceolate, narrow. *Female.*—Abdomen hardly extending so far as the hind wings. Fore wings broader, more obtuse at the tips.

This genus may belong to another family of *Noctuites.*

1. Siga Liris.

Viridis; alæ venis nigris, plaga discali vitrea marginata; anticæ maris *striga subcostali vitrea annulum nigrum includente,* fœm. *maculis duabus vitreis, una trigona, altera quadrata.*

Phalæna Liris, *Cram. Pap. Exot.* i. 98, pl. 63, f. F.; iii. 122, pl. 262, f. E.

Siga Liris, *Hübn. Verz. Schmett.* (*Phalænæ Fodicantes Teredines Graciles*) 195, 2012.

West Indies.

Fam. 10. HELIOTHIDÆ.

Heliothidi, *Boisd. Guen. Ann. Soc. Ent. Fr.* x. 53.
Heliothidæ, *Guen. Noct.* ii. 166.

Diurnæ. Statura mediocris aut parva. Palpi validi, breves aut breviusculi. Antennæ simplices, rarissime serratæ aut pectinatæ. Thorax validus, sæpe villosus. Abdomen læve. Pedes sæpissime spinis aut unguibus armati. Alæ sæpissime nigro notatæ; posticæ sæpe pallidæ, margine obscuro.

Flight diurnal. Size moderate or small. Palpi stout, short or rather short, generally porrect; third joint conical, not elongated.

Antennæ simple, very rarely serrated or pectinated in the male. Thorax stout, often villose. Abdomen smooth. Legs often armed with spines or hooks. Wings most often marked with black; fore wings moderately broad; hind wings generally pale, with a dark border.

A. Corpus gracile.
  A. Alæ posticæ non marginatæ.
    A. Alæ anticæ latiusculæ.
      a. Alæ anticæ apice angulatæ. - - 1. ORIA, *Geyer.*
      b. Alæ anticæ rotundatæ. - - - 8. TAMILIA, *Guen.*
    B. Alæ anticæ sat angustæ. - - 3. ALARIA, *Westw.*
  B. Alæ posticæ marginatæ. - - 10. ANTHŒCIA, *Boisd.*
B. Corpus robustum.
  A. Alæ anticæ apice rotundatæ.
    A. Thorax cristatus. - - - 2. CHARICLEA, *Steph.*
    B. Thorax non cristatus.
      a. Palpi ascendentes.
        i. Thorax dense pilosus. - - 4. EUTERPIA, *Guen.*
        ii. Thorax non dense pilosus. - 6. LEPIPOLYS, *Guen.*
      b. Palpi porrecti.
        i. Alæ anticæ pallidiores. - 9. HELIOTHIS, *Och.*
        ii. Alæ anticæ obscuriores. - - 12. ANARTA, *Ochs.*
  B. Alæ anticæ apice angulatæ.
    A. Statura mediocris.
      a. Alæ anticæ stramineæ. - - 5. STEPHANIA, *Guen.*
      b. Alæ anticæ viridescentes. - 7. CHLORIDEA, *Westw.*
    B. Statura parva.
      a. Palpi longiusculi. - - 11. JANTHINEA, *Guen.*
      b. Palpi breves. - - - - 13. CYREBIA, *Guen.*
      c. Palpi brevissimi. - - - 14. PANEMERIA, *Hübn.*

Genus 1. ORIA.

Corpus gracile. Proboscis mediocriter longa. Palpi sat graciles, vix ascendentes; articulus 3us conicus, 2i quadrante brevior. Antennæ corporis dimidio paullo longiores. Pedes graciles; tibiæ posticæ calcaribus longis. Alæ anticæ latiusculæ, apud costam rectæ, apice angulatæ, margine exteriore perparum obliquo. *Mas.* —Antennæ subciliatæ. Abdomen alas posticas superans. *Fœm.*— Abdomen alas posticas non superans.

Oria, *Geyer. Guen. Noct.* ii. 166.

Body slender. Proboscis moderately long. Palpi rather slender, hardly ascending; third joint conical, less than one-fourth of the length of the second. Antennæ a little more than half the length of the body. Legs slender; hind tibiæ with long spurs. Fore wings rather broad, straight in front, angular at the tips, very slightly oblique along the exterior border. *Male.*—Antennæ slightly ciliated. Abdomen extending beyond the hind wings. *Female.*—Abdomen not extending beyond the hind wings.

1. Oria sanguinea.

Mas. *Albido-flavescens; alæ anticæ rufescentes nigro venosæ flavido variæ, fasciis duabus obliquis maculaque intermedia discali nigricantibus; posticæ nigricantes, ciliis pallido marginatis.*

Oria sanguinea (Noctua genuina, Heliophila pallida), *Geyer, Samml. Exot. Schmett.* iv. 9, 307, f. 613, 614. *Guen. Noct.* ii. 167, 913.

Georgia.

a, *b*. North America. From Mr. Milne's collection.
c—*e*. North America.

Genus 2. CHARICLEA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, porrecti, pilosi, caput paullo superantes; articulus 3us conicus, 2i quadrante non longior. Antennæ simplices, corporis dimidio multo longiores. Thorax postice cristatus. Abdomen alas posticas paullo superans. Pedes mediocriter validi; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter latæ, apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo apud medium subconvexo.

Chariclea, *Steph.*; *Boisd.*; *Guen. Ann. Soc. Ent. Fr.* viii. 521; *Noct.* ii.
Xylina, p., *Ochs.*; *Treits.*
Periphanea, p., *Hübn. Verz. Schmett.* 247.

Body stout. Proboscis moderately long. Palpi stout, porrect, pilose, extending a little beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ simple, much more than half the length of the body. Thorax crested hindward. Abdomen extending for one-fourth of its length beyond the

hind wings. Legs moderately stout; hind tibiæ with four long spurs. Fore wings moderately broad, straight along the costa, rounded at the tips; exterior border moderately oblique, slightly convex in the middle.

1. Chariclea Delphinii.

Testacea; abdomen lateribus purpurascentibus nigro guttatis; alæ anticæ saturate purpureæ, fasciis undulatis pallidioribus et nigricantibus, ciliis testaceis; posticæ albidæ, margine lato nigricante.

——— ———, *Merian, Ins. Eur.* i. pl. 40. *Roës. Ins.* i. pl. 12. *Wilk. Pap.* iii. pl. 1, a, 4. *Geoffr. Ins. Par.* ii. 164, 109. *Engr. Pap. d'Eur.* 538, a—g.

Noctua Delphinii, *Wien. Verz.* 87, 8. *Fabr. Sp. Ins.* 231, 111; *Mant. Ins.* ii. 167, 214; *Ent. Syst.* iii. 2, 90, 267. *Esp. Schmett.* iv. pl. 175, f. 1—4. *Bork. Eur. Schmett.* iv. 652, 279. *Hübn. Eur. Schmett. Noct.* pl. 42, f. 204; pl. 137, f. 622. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 110, f. 1. *Donov. Brit. Ins.* x. pl. 331. *Haw. Lep. Brit.* 261.

Phalæna-Noctua Delphinii, *Gmel. ed. Syst. Nat.* i. 5, 2576, 188.

Xylina Delphinii, *Treit. Schmett.* v. 82, 34.

Heliothisa Delphinii, *Meig. Handb.* 177, 76; *Syst. Besch.* iii. 232, 18, pl. 120, f. 18.

Chariclea Delphinii, *Steph. Ill. Brit. Ent. Haust.* iii. 92. *Curt. Brit. Ent.* pl. 76. *Boisd. Ind. Meth.* 162, 1225. *Guen. Noct.* ii. 168, 914.

Periphanea Delphinii, *Hübn. Verz. Schmett.* 247, 2456.

a, b. England. From Mr. Stephens' collection.
c. England.
d. Paris. Presented by Dr. Boisduval.
e—h. Europe. From M. Becker's collection.
i. Europe.

Asia.

2. Chariclea Prazanoffzkyi.

Straminea; thorax fascia subcervina; abdomen testaceo-albidum; alæ anticæ fasciis duabus obliquis roseis, interiore diffusa, exteriore subduplicata; posticæ subcinereæ, ciliis basique albidis.

Chariclea Prazanoffzkyi, *Guen. Noct.* ii. 169, 915.

Turkey in Asia.

3. Chariclea Taurica.

Rosea; abdomen cinerascens, lateribus roseis; alæ anticæ albidæ, bari ciliisque roseis, margine exteriore purpureo, strigis basilibus saturate roseis, fascia media antice rosea purpureo varia, postice e lineis duabus lutescentibus; posticæ cineraæ, ban pallidiores, ciliis roseis.

Chariclea Taurica, *Herr.-Schæff. Schmett. Eur.* ii. pl. 52, f. 263, 264. *Guen. Noct.* ii. 169, 916.

Crimea?

4. Chariclea Eversmannii.

Albido-cana; thorax roseus; alæ anticæ roseæ, margine postico intus fusco extus puniceo, in posticis fusco.

Chariclea (Heliothis) Eversmanni, *Kolenati, Mel. Ent.* 102, pl. 18, f. 3. *Zeller, Ent. Zeit. Stett.* ix. 373.

Genus 3. ALARIA.

Corpus sat gracile. Proboscis mediocriter longa. Palpi porrecti, pilosi, caput paullo superantes; articulus 3us minimus, 2 quadrante brevior. Antennæ simplices, corporis dimidio multo longiores. Abdomen alas posticas vix superans. Pedes sat graciles; tibiæ posticæ calcaribus longis. Alæ anticæ sat angustæ, apud costam rectæ, apice angulatæ, margine exteriore sat obliquo.

Alaria, *Westw. Nat. Libr.* xxxvii. *Exotic Moths*, 200.
Rhodophora, *Guen. Noct.* ii. 170.

Body rather slender. Proboscis moderately long. Palpi porrect, pilose, extending a little beyond the head; third joint very small, less than one-fourth of the length of the second. Antennæ simple, much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Fore wings rather narrow, straight in front, angular at the tips, rather oblique along the exterior border.

1. Alaria Gauræ.

Alba; caput et thorax flavo varia; alæ anticæ plus dimidio basali plerumque flavescentes, vitta basali fasciaque obliqua postmedia roseis, apices versus pallide roseæ; posticæ albæ, margine pallide roseo.

Phalæna Gauræ, *Abbot & Smith, Nat. Hist. Lep. Ins. Georg.* ii. 197, pl. 99.
Alaria Gauræ, *Westw. Nat. Libr.* xxxvii. 200, pl. 24, f. 4.
Porphyrinia matutina (Noctua semigeometra, Antophila blanda), *Hübn. Samml. Exot. Schmett.* iii. 35, 279, f. 557, 558.

a. East Florida. Presented by E. Doubleday, Esq.
b—d. Georgia. From Mr. Milne's collection.
e, f. Georgia.

2. Alaria Florida.

Flavescens; caput roseum; alæ anticæ roseæ, apud marginem exteriorem flavescentes; posticæ testaceo-albidæ.

Rhodophora Florida, *Guen. Noct.* ii. 171, 918.

a, b. New York. Presented by E. Doubleday, Esq.
c. Orilla, West Canada. From Mr. Bush's collection.

Genus 4. EUTERPIA.

Corpus robustum, non cristatum. Proboscis mediocriter longa. Palpi breves, subascendentes; articulus 3us conicus, 2i quadrante non longior. Antennæ simplices, corporis dimidio longiores. Pedes mediocriter robusti; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter latæ, apud costam rectæ, apice rotundatæ, margine exteriore subconvexo subobliquo.

Euterpia, *Guen. Ann. Soc. Ent. Fr.* 1850; *Noct.* ii 171.
Cleophana, p., *Boisd.; Duponch.*

Body stout, not crested. Proboscis moderately long. Palpi short, slightly ascending; third joint conical, not more than one-fourth of the length of the second. Antennæ simple, more than half the length of the body. Legs moderately stout; hind tibiæ with four long spurs. Fore wings moderately broad, straight in front, rounded at the tips, slightly convex and slightly oblique along the exterior border.

1. Euterpia Laudeti.

Alba; alæ anticæ fasciis duabus repandis roseo-fuscis nigro et glaucescente variis, exteriore duplicata lunulam glauco-nigram includente, annulo intermedio nigricante; posticæ fusco marginatæ.

Cleophana Laudeti, *Boisd. Ind. Méth.* 152, 1224, *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 234, pl. 70. *Herr.-Schæff. Schmett. Eur.* ii. pl. 45, f. 228, 229.

Euterpia Laudeti, *Guen. Noct.* ii. 172, 919.

Alps of the Valais. South Russia.

a, *b*. Europe. From M. Becker's collection.

Genus 5. STEPHANIA.

Corpus sat validum. Proboscis mediocriter longa. Palpi porrecti, caput perpaullo superantes; articulus 3us minutus, conicus. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas paullo superans. Alæ anticæ mediocriter latæ, apud costam rectæ, apice angulatæ, margine exteriore vix obliquo.

Xanthia, p., *Boisd.*; *Duponch.*
Stephania, *Guen. Noct.* ii. 172.
Mycteroplus, *Herr.-Schæff. Schmett. Eur.* ii. 242.

Body moderately stout. Proboscis moderately long. Palpi porrect, extending very little beyond the head; third joint minute, conical. Antennæ simple, more than half the length of the body. Abdomen extending a little beyond the hind wings. Fore wings moderately broad, straight in front, angular at the tips, hardly oblique along the exterior border.

1. Stephania puniceago.

Pallide straminea; abdomen stramineo-albidum; alæ anticæ fasciis duabus saturatioribus albido marginatis, maculis indistinctis; posticæ albæ.

Xanthia puniceago, *Boisd. Ind. Méth.* 146, 1185. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 234, pl. 70.

Mycteroplus puniceago, *Herr.-Schæff. Schmett. Eur.* ii. 242, 180, pl. 9, f. 43.

Stephania puniceago, *Guen. Noct.* ii. 173, 920.

South Russia.

Helio Nida

Genus 6. LEPIPOLYS.

Corpus sat validum. Proboscis mediocriter longa. Palpi breves, subascendentes; articulus 3us minutus, 2i quadrante multo brevior. Antennæ corporis dimidio longiores. Pedes graciles; tibiæ posticæ calcaribus longis. Alæ anticæ sat angustæ, apud costam rectæ, apice rotundatæ, margine exteriore subconvexo mediocriter obliquo. *Mas.*—Antennæ vix ciliatæ. Abdomen alas posticas triente superans.

Lepipolys, *Guen. Noct.* ii. 173.

Body moderately stout. Proboscis moderately long. Palpi short, slightly ascending; third joint minute, much less than one-fourth of the length of the second. Antennæ more than half the length of the body. Legs slender; hind tibiæ with long spurs. Fore wings rather narrow, straight in front, rounded at the tips, slightly convex and moderately oblique along the exterior border. *Male.*—Antennæ very minutely ciliated. Abdomen extending for one-third of its length beyond the hind wings.

1. Lepipolys perscripta.

Cinerea; thorax nigro conspersus; alæ anticæ lineis duabus transversis undulatis lunulisque marginalibus nigris, linea submarginali angulosa albida, claviformi, orbiculari et reniformi magnis nigro ex parte marginatis; posticæ canescentes, margine cupreo-fuscescente.

Lepipolys perscripta, *Guen. Noct.* ii. 175, 921.

a—h. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

Genus 7. CHLORIDEA.

Corpus sat validum. Proboscis mediocriter longa. Palpi porrecti, sat graciles, caput superantes; articulus 3us lanceolatus, 2i triente non brevior. Antennæ simplices, corporis dimidio non longiores. Abdomen alas posticas paullo superans. Pedes sat graciles; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter latæ, apud costam rectæ, apice subangulatæ, margine exteriore recto mediocriter obliquo.

Chloridea, *Westw. Nat. Libr.* xxxvii. *Exotic Moths*, 198.
Aspila, *Guen. Noct.* ii. 174.

Body moderately stout. Proboscis moderately long. Palpi porrect, rather slender, extending some distance beyond the head; third joint lanceolate, about one-third of the length of the second. Antennæ simple, about half the length of the body. Abdomen extending a little beyond the hind wings. Legs rather slender; hind tibiæ with long spurs. Fore wings moderately broad, straight in front, slightly angular at the tips, straight and moderately oblique along the exterior border.

Xanthia viridescens and *X. prasina* may belong to this genus.

1. Chloridea Rhexiæ.

Viridis; alæ anticæ fasciis obliquis et macularum marginibus saturatioribus; posticæ albæ, margine cupreo.

Phalæna Rhexiæ, *Abbot & Smith, Lep. Ins. Georg.* ii. 199, pl. 100.
Chloridea Rhexiæ, *Westw. Nat. Libr.* xxxvii. *Exot. Moths*, 198, pl. 24, f. 3.
Aspila Rhexiæ, *Guen. Noct.* ii. 175, 922.

a, b. East Florida. Presented by E. Doubleday, Esq.
c—e. Georgia. From Mr. Milne's collection.
f—h. Santarem. From Mr. Bates' collection.
i. St. Domingo. From Mr. Tweedie's collection.

2. Chloridea virescens.

Viridis, subtus alba; palpi pedesque ex parte rosei; abdomen testaceum; alæ anticæ fasciis tribus saturatioribus, exterior plus obliquo, costa subrosea; posticæ albæ, margine exterior fuscescente, interiore testaceo.

Noctua virescens, *Fabr. Ent. Syst.* iii. 280, 72. *Oliv. Enc. Méth.* vii. 269.
Aspila virescens, *Guen. Noct.* ii. 175, 923.

West Indies.

3. Chloridea subflexa.

Alæ anticæ pallidissime flavescente-virides, apices versus magis attenuatæ, fasciis tribus olivaceo-viridi valde nebulosis, 3a apud medium flexa, maculis submarginalibus vagis obscurii, margine exteriore subconcavo; posticæ candidæ, opalinæ.

Aspila subflexa, *Guen. Noct.* ii. 175, 924.

North America.

Genus 8. TAMILA.

Corpus sat gracile. Proboscis mediocriter longa. Palpi porrecti, graciles, caput vix superantes; articulus 3us conicus, minimus, 2i quadrante brevior. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ posticæ calcaribus longis. Alæ anticæ latiusculæ, apud costam rectæ, apice subrotundatæ, margine exteriore mediocriter obliquo.

Tamila, *Guen. Noct.* ii. 176.
Acontia, p., *Steph.*

Body rather slender. Proboscis moderately long. Palpi porrect, slender, hardly extending beyond the head; third joint conical, very minute, not one-fourth of the length of the second. Antennæ simple, more than half the length of the body. Abdomen not extending beyond the hind wings. Legs rather slender; hind tibiæ with long spurs. Fore wings rather broad, straight in front, somewhat rounded at the tips, moderately oblique along the exterior border.

1. Tamila Nundina.

Alba; alæ anticæ fasciis variis fusco-cupreis, orbiculari punctiformi, reniformi magna punctisque marginalibus nigricantibus; posticæ lunula discali fasciaque submarginali fusco-cupreis.

——— ———, *Drury, Ins.* i. 36, pl. 18, f. 5.
Phalæna (Noctua) Nundina, *Drury, App.* ii.
Noctua (Acontia?) Nundina, *Westw. Drury*, i. 35, pl. 18, f. 5.

a. New York. Presented by E. Doubleday, Esq.
b. ———?

2. Tamila? lignaris.

Fœm. *Ferruginea; alæ basi fulvescentes, fasciis plurimis approximatis perobliquis nigro-violaceis in alarum anticarum apicibus convergentibus; anticæ guttis duabus anticis discalibus nigris.*

Itomia lignaris (Noctua semigeometra, Heliothis alacris), *Hübn. Samml. Exot. Schmett.* ii. 22, 159, f. 317, 318; *Verz. Schmett.* 271, 2673.

Surinam.

Genus 9. HELIOTHIS.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, pilosi, caput superantes; articulus 3us longi-conicus; 2i quadrante non longior. Antennæ simplices, corporis dimidio non breviores. Abdomen alas posticas quadrante superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter latæ, apud costam rectæ, apice subrotundatæ, margine exteriore mediocriter obliquo.

Heliothis, *Guen. Ann. Soc. Ent. Fr.* x. 55; *Noct.* ii. 177.
Melicleptria et Pyrrhia, p., *Hübn. Verz. Schmett.* 262.
Heliothis, p., *Ochs.*; *Boisd.*

Body stout. Proboscis moderately long. Palpi porrect, pilose, extending somewhat beyond the head; third joint elongate-conical, not more than one-fourth of the length of the second. Antennæ simple, full half the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout; hind tibiæ with long spurs. Fore wings moderately broad, straight in front, somewhat rounded at the tips, moderately oblique along the hind border.

Europe.

A. Alæ anticæ ex parte roseæ aut purpureæ.
  A. Alæ anticæ marginatæ. - - - . marginata, *Klöem.*
  B. Alæ anticæ vix marginatæ.
    A. Alæ posticæ testaceæ. - - - purpurites, *Hübn.*
    B. Alæ posticæ obscuræ.
      a. Alæ anticæ pallide sulphureæ. - Victorina, *Sodoff.*
      b. Alæ anticæ viridescente-testaceæ. - incarnata, *Frey.*
      c. Alæ anticæ roseæ. - - - Rhodites, *Eversm.*
B. Alæ anticæ roseo aut purpureo non variæ.
  A. Alæ anticæ cervinæ.
    A. Alæ posticæ pallidæ.
      a. Alæ posticæ margine non excavato. peltigera, *Wien. Verz.*
      b. Alæ posticæ margine excavato. - armigera, *Hübn.*
    B. Alæ posticæ nigricantes. - - - dipsacea, *Linn.*
  B. Alæ anticæ cinereo-fuscæ.
      a. Alæ posticæ nigricantes, albido variæ. Ononidis, *Wien. Verz.*
      b. Alæ posticæ albidæ fusco variæ. - scutosa, *Wien. Verz.*

1. Heliothis purpurites.

Cervina; abdomen testaceum, apice cervinum; alæ anticæ pallide cervinæ, annulis duobus discalibus lineisque transversis ex parte undulosis fuscis, dimidio apicali roseo; posticæ testaceæ, margine lato fusco.

——— ———, *Engr. Pap. d'Eur.* 481, a, b.
Noctua purpurina, *Esp. Schmett.* iv. pl. 195, f. 2.
Noctua purpurites, *Hübn. Eur. Schmett. Noct.* f. 759—763. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 122, f. 3. *Frey. Beit.* pl. 136.
Noctua marginata, *Donov. Brit. Ins.* v. pl. 150.
Noctua rutilago, *Hübn. Eur. Schmett. Noct.* pl. 111, f. 519.
Pyrrhia purpurago, *Hübn. Verz. Schmett.* 233, 2335.
Heliothis purpurites, *Treit. Schmett.* v. 234, 8. *Boisd. Ind. Méth.* 163, 1310. *Guen. Noct.* ii. 178, 926.
Heliothisa purpurites, *Meig. Syst. Besch.* iii. 232, 19, pl. 129, f. 16.

Hungary.

a, b. Europe. From M. Becker's collection.

2. Heliothis Victorina.

Alæ anticæ pallide sulphureæ, a medio roseo-purpurascentes, signo venæ transversæ obscuriore, strigis duabus distantibus, posteriore obsoleta, purpureis; posticæ fuscescentes, postice obscuratæ, ciliis albidis roseo-tinctis.

Heliothis Victorina, *Sodoffsky, Ent. Zeit. Stett.* x. 130.

Caucasus.

3. Heliothis marginata.

Ferruginea; abdomen testaceum; alæ anticæ ochraceæ, fascia lata marginali ferrugineo-purpurascente fusco marginata, annulis duobus discalibus lineisque tribus transversis variis ferrugineis, lunulis exterioribus fuscis ochraceo marginatis; posticæ testaceæ, litura discali margineque lato nigricantibus.

——— ———, *Engr. Pap. d'Eur.* 480, a—c.
Noctua marginata, *Kléem, Beit.* ii. pl. 7, f. 6—8. *Fabr. Ent. Syst.* iii. 2, 88, 260. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 119, f. 8. *Frey. Ent. Zeit. Stett.* ii. 109.
Noctua rutilago, *Wien. Verz.* 88, 4. *Fuessl. Mag.* 219. *Schr. Faun. Boic.* 1579. *Hübn. Eur. Schmett. Noct.* f. 185.

Noctua umbrago, *Esp. Schmett.* iv. pl. 185, f. 6, 7.
Noctua conspicua, *Bork. Eur. Schmett.* iv. 50.
Noctua marginago, *Haw. Lep. Brit.* 217.
Pyrrbia rutilago, *Hübn. Verz. Schmett.* 233, 2337.
Heliothis marginata, *Treit. Schmett.* v. 232, 7. *Steph. Ill. Brit. Ent.* iii. 108. *Boisd. Ind. Méth.* 163, 1309. *Guen. Noct.* ii. 178, 927.
Heliothisa marginata, *Meig. Syst. Besch.* iii. 233, 20, pl. 120, f. 17.

a—h. England. From Mr. Stephens' collection.
i—k. England.
l, m. Europe. From M. Becker's collection.
n, o. Germany.

4. Heliothis incarnata.

Roseo-testacea; alæ anticæ viridescente-testaceæ, roseo marginatæ, fascia obliqua incompleta subobsoleta fuscescente, nonnunquam lituris costalibus punctisque discalibus nigris; posticæ nigro-fuscæ, basi plus minusve pallidiores, ciliis roseis.

Noctua incarnata, *Frey. Beit.* iii. pl. 256, f. 4; iv. pl. 383.
Heliothis incarnata, *Eversm. Faun. Volg-Ural.* 329. *Guen. Noct.* ii. 179, 930.
Heliothis Boisduvalii, *Ramb. Faun. Andalus. Boisd. Ind. Méth.* 163, 1311. *Herr.-Schæff. Schmett. Eur.* ii. pl. 92, f. 262.

Sarepta.

a. Europe. From M. Becker's collection.

5. Heliothis Rhodites.

Alæ anticæ purpurascente-roseæ, maculis tribus longitudinalibus luteo-albis; posticæ subcinereæ, purpureo micantes.

Heliothis Rhodites, *Eversmann, Bull. Soc. Imp. Nat. Mosc.* 1851, xxiv. N, 2, 635, 22.

Sarepta. Southern and eastern borders of the Black Sea.

6. Heliothis peltigera.

Pallide cervina; abdomen basi albidum; alæ anticæ fascia lata plagaque postica interiore obscurioribus, maculis duabus guttisque costalibus nigro-cinereis, puncto postico submarginali atro, macula parva basim versus subochracea; posticæ albidæ, lunula discali margineque latissimo nigricantibus.

——— ———, *Engr. Pap. d'Eur.* 555, a.
Noctua peltigera, *Wien. Verz.* 89, 2. *Hübn. Eur. Schmett. Noct.* pl. 63, f. 300. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 119, f. 5. *Frey. Beit.* ii. pl. 167.
Noctua Barbara, *Fabr. Ent. Syst.* iii. 2, 111, 334. *Coqueb. Ill. Icon.* pl. 17, f. 3.
Noctua Florentina, *Esp. Schmett.* iv. pl. 135, f. 2.
Noctua scutigera, *Bork. Eur. Schmett.* iv. 93, 37.
Noctua straminea, *Donov. Brit. Ins.* ii. pl. 61.
Heliothis peltigera, *Treit. Schmett.* v. 227, 5. *Steph. Ill. Brit. Ent. Haust.* iii. 109. *Boisd. Ind. Méth.* 163, 1307. *Guen. Noct.* ii. 180, 931.
Phalæna-Noctua Alphea, *Cram. Pap. Exot.* iii. 99, pl. 250, f. F.
Melicleptria peltigera, *Hübn. Verz. Schmett.* 262, 2576.
Melicleptria Alphea, *Hübn. Verz. Schmett.* 262, 2577
Heliothisa peltigera, *Meig. Syst. Besch.* iii. 234, pl. 1

a—d. England. From Mr. Stephens' collection.
e, f. England.
g. Devonshire. Presented by W. Raddon, Esq.
h. South Africa. From Mr. Argent's collection.
i. South Africa. Presented by Dr. A. Smith.
j. Nepaul. Presented by the Entomological Club.
k. North Bengal. Presented by W. W. Saunders.
l—n. Cape. From M. Dregé's collection.
o. New Zealand. Presented by Dr. Sinclair.
p. Sicily. From Mr. Melly's collection.
q, r. Europe. From M. Becker's collection.
s, t. Gibraltar. From Mr. Milne's collection.

Var.? *Straminea; alæ anticæ maculis marginalibus et submarginalibus guttisque discalibus ferrugineis, fascia exteriore sordide straminea, margine fusco; posticæ testaceæ, macula guttaque discalibus fasciaque lata exteriore maculam testaceam includente ferruginea.*

Phalæna Charmione, *Stoll, Cram. Pap. Exot.* v. 162, pl. 36, f. 10.
Cape.

7. Heliothis armigera.

Pallide cervina; alæ anticæ fuscescente plus minusve fasciatæ et nebulosæ, orbiculari et reniformi nigricantibus; posticæ pallidiores, litura discali margineque latissimo sæpe excavato nigricantibus.

Noctua umbrago, *Esp. Schmett.* iv. pl. 185, f. 6, 7.
Noctua conspicua, *Bork. Eur. Schmett.* iv. 50.
Noctua marginago, *Haw. Lep. Brit.* 217.
Pyrrbia rutilago, *Hübn. Verz. Schmett.* 233, 2337.
Heliothis marginata, *Treit. Schmett.* v. 232, 7. *Steph. Ill. Brit. Ent.* iii. 108. *Boisd. Ind. Méth.* 163, 1309. *Guen. Noct.* ii. 178, 927.
Heliothisa marginata, *Meig. Syst. Besch.* iii. 233, 20, pl. 120, f. 17.

a—h. England. From Mr. Stephens' collection.
i—k. England.
l, m. Europe. From M. Becker's collection.
n, o. Germany.

4. Heliothis incarnata.

Roseo-testacea; alæ anticæ viridescente-testaceæ, roseo marginatæ, fascia obliqua incompleta subobsoleta fuscescente, nonnunquam lituris costalibus punctisque discalibus nigris; posticæ nigro-fuscæ, basi plus minusve pallidiores, ciliis roseis.

Noctua incarnata, *Frey. Beit.* iii. pl. 256, f. 4; iv. pl. 383.
Heliothis incarnata, *Eversm. Faun. Volg-Ural.* 329. *Guen. Noct.* ii. 179, 930.
Heliothis Boisduvalii, *Ramb. Faun. Andalus. Boisd. Ind. Méth.* 163, 1311. *Herr.-Schæff. Schmett. Eur.* ii. pl. 92, f. 262.

Sarepta.

a. Europe. From M. Becker's collection.

5. Heliothis Rhodites.

Alæ anticæ purpurascente-roseæ, maculis tribus longitudinalibus luteo-albis; posticæ subcinereæ, purpureo micantes.

Heliothis Rhodites, *Eversmann, Bull. Soc. Imp. Nat. Mosc.* 1851, xxiv. N, 2, 635, 22.

Sarepta. Southern and eastern borders of the Black Sea.

6. Heliothis peltigera.

Pallide cervina; abdomen basi albidum; alæ anticæ fascia lata plagaque postica interiore obscurioribus, maculis duabus guttisque costalibus nigro-cinereis, puncto postico submarginali atro, macula parva basim versus subochracea; posticæ albidæ, lunula discali margineque latissimo nigricantibus.

——— ———, *Engr. Pap. d'Eur.* 555, a.
Noctua peltigera, *Wien. Verz.* 89, 2. *Hübn. Eur. Schmett. Noct.* pl. 63, f. 300. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 119, f. 5. *Frey. Beit.* ii. pl. 167.
Noctua Barbara, *Fabr. Ent. Syst.* iii. 2, 111, 334. *Coqueb. Ill. Icon.* pl. 17, f. 3.
Noctua Florentina, *Esp. Schmett.* iv. pl. 135, f. 2.
Noctua scutigera, *Bork. Eur. Schmett.* iv. 93, 37.
Noctua straminea, *Donov. Brit. Ins.* ii. pl. 61.
Heliothis peltigera, *Treit. Schmett.* v. 227, 5. *Steph. Ill. Brit. Ent. Haust.* iii. 109. *Boisd. Ind. Méth.* 163, 1307. *Guen. Noct.* ii. 180, 931.
Phalæna-Noctua Alphea, *Cram. Pap. Exot.* iii. 99, pl. 250, f. F.
Melicleptria peltigera, *Hübn. Verz. Schmett.* 262, 2576.
Melicleptria Alphea, *Hübn. Verz. Schmett.* 262, 2577.
Heliothisa peltigera, *Meig. Syst. Besch.* iii. 234, pl. [illegible]

a—d. England. From Mr. Stephens' collection.
e, f. England.
g. Devonshire. Presented by W. Raddon, Esq.
h. South Africa. From Mr. Argent's collection.
i. South Africa. Presented by Dr. A. Smith.
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l—n. Cape. From M. Dregé's collection.
o. New Zealand. Presented by Dr. Sinclair.
p. Sicily. From Mr. Melly's collection.
q, r. Europe. From M. Becker's collection.
s, t. Gibraltar. From Mr. Milne's collection.

Var.? *Straminea; alæ anticæ maculis marginalibus et submarginalibus guttisque discalibus ferrugineis, fascia exteriore sordide straminea, margine fusco; posticæ testaceæ, macula guttaque discalibus fasciaque lata exteriore maculam testaceam includente ferruginea.*

Phalæna Charmione, *Stoll, Cram. Pap. Exot.* v. 162, pl. 36, f. 10.

Cape.

7. Heliothis armigera.

Pallide cervina; alæ anticæ fuscescente plus minusve fasciatæ et nebulosæ, orbiculari et reniformi nigricantibus; posticæ pallidiores, litura discali margineque latissimo sæpe excavato nigricantibus.

Noctua umbrago, *Esp. Schmett.* iv. pl. 185, f. 6, 7.
Noctua conspicua, *Bork. Eur. Schmett.* iv. 50.
Noctua marginago, *Haw. Lep. Brit.* 217.
Pyrrbia rutilago, *Hübn. Verz. Schmett.* 233, 2337.
Heliothis marginata, *Treit. Schmett.* v. 232, 7. *Steph. Ill. Brit. Ent.* iii. 108. *Boisd. Ind. Méth.* 163, 1309. *Guen. Noct.* ii. 178, 927.
Heliothisa marginata, *Meig. Syst. Besch.* iii. 233, 20, pl. 120, f. 17.

a—h. England. From Mr. Stephens' collection.
i—k. England.
l, m. Europe. From M. Becker's collection.
n, o. Germany.

4. Heliothis incarnata.

Roseo-testacea; alæ anticæ viridescente-testaceæ, roseo marginatæ, fascia obliqua incompleta subobsoleta fuscescente, nonnunquam lituris costalibus punctisque discalibus nigris; posticæ nigro-fuscæ, basi plus minusve pallidiores, ciliis roseis.

Noctua incarnata, *Frey. Beit.* iii. pl. 256, f. 4; iv. pl. 383.
Heliothis incarnata, *Eversm. Faun. Volg-Ural.* 329. *Guen. Noct.* ii. 179, 930.
Heliothis Boisduvalii, *Ramb. Faun. Andalus. Boisd. Ind. Méth.* 163, 1311. *Herr.-Schæff. Schmett. Eur.* ii. pl. 92, f. 262.

Sarepta.

a. Europe. From M. Becker's collection.

5. Heliothis Rhodites.

Alæ anticæ purpurascente-roseæ, maculis tribus longitudinalibus luteo-albis; posticæ subcinereæ, purpureo micantes.

Heliothis Rhodites, *Eversmann, Bull. Soc. Imp. Nat. Mosc.* 1851, xxiv. N, 2, 635, 22.

Sarepta. Southern and eastern borders of the Black Sea.

6. Heliothis peltigera.

Pallide cervina; abdomen basi albidum; alæ anticæ fascia lata plagaque postica interiore obscurioribus, maculis duabus guttisque costalibus nigro-cinereis, puncto postico submarginali atro, macula parva basim versus subochracea; posticæ albidæ, lunula discali margineque latissimo nigricantibus.

——— ———, *Engr. Pap. d'Eur.* 555, a.
Noctua peltigera, *Wien. Verz.* 89, 2. *Hübn. Eur. Schmett. Noct.* pl. 63, f. 300. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 119, f. 5. *Frey. Beit.* ii. pl. 167.
Noctua Barbara, *Fabr. Ent. Syst.* iii. 2, 111, 334. *Coqueb. Ill. Icon.* pl. 17, f. 3.
Noctua Florentina, *Esp. Schmett.* iv. pl. 135, f. 2.
Noctua scutigera, *Bork. Eur. Schmett.* iv. 93, 37.
Noctua straminea, *Donov. Brit. Ins.* ii. pl. 61.
Heliothis peltigera, *Treit. Schmett.* v. 227, 5. *Steph. Ill. Brit. Ent. Haust.* iii. 109. *Boisd. Ind. Méth.* 163, 1307. *Guen. Noct.* ii. 180, 931.
Phalæna-Noctua Alphea, *Cram. Pap. Exot.* iii. 99, pl. 250, f. F.
Melicleptria peltigera, *Hübn. Verz. Schmett.* 262, 2576.
Melicleptria Alphea, *Hübn. Verz. Schmett.* 262, 2577.
Heliothisa peltigera, *Meig. Syst. Besch.* iii. 234, pl.

a—d. England. From Mr. Stephens' collection.
e, f. England.
g. Devonshire. Presented by W. Raddon, Esq.
h. South Africa. From Mr. Argent's collection.
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p. Sicily. From Mr. Melly's collection.
q, r. Europe. From M. Becker's collection.
s, t. Gibraltar. From Mr. Milne's collection.

Var.? *Straminea; alæ anticæ maculis marginalibus et submarginalibus guttisque discalibus ferrugineis, fascia exteriore sordide straminea, margine fusco; posticæ testaceæ, macula guttaque discalibus fasciaque lata exteriore maculam testaceam includente ferruginea.*

Phalæna Charmione, *Stoll, Cram. Pap. Exot.* v. 162, pl. 36, f. 10.

Cape.

7. Heliothis armigera.

Pallide cervina; alæ anticæ fuscescente plus minusve fasciatæ et nebulosæ, orbiculari et reniformi nigricantibus; posticæ pallidiores, litura discali margineque latissimo sæpe excavato nigricantibus.

Noctua umbrago, *Esp. Schmett.* iv. pl. 185, f. 6, 7.
Noctua conspicua, *Bork. Eur. Schmett.* iv. 50.
Noctua marginago, *Haw. Lep. Brit.* 217.
Pyrrhia rutilago, *Hübn. Verz. Schmett.* 233, 2337.
Heliothis marginata, *Treit. Schmett.* v. 232, 7. *Steph. Ill. Brit. Ent.* iii. 108. *Boisd. Ind. Méth.* 163, 1309. *Guen. Noct.* ii. 178, 927.
Heliothisa marginata, *Meig. Syst. Besch.* iii. 233, 20, pl. 120, f. 17.

a—h. England. From Mr. Stephens' collection.
i—k. England.
l, m. Europe. From M. Becker's collection.
n, o. Germany.

4. Heliothis incarnata.

Roseo-testacea; alæ anticæ viridescente-testaceæ, roseo marginatæ, fascia obliqua incompleta subobsoleta fuscescente, nonnunquam lituris costalibus punctisque discalibus nigris; posticæ nigro-fuscæ, basi plus minusve pallidiores, ciliis roseis.

Noctua incarnata, *Frey. Beit.* iii. pl. 256, f. 4; iv. pl. 383.
Heliothis incarnata, *Eversm. Faun. Volg-Ural.* 329. *Guen. Noct.* ii. 179, 930.
Heliothis Boisduvalii, *Ramb. Faun. Andalus. Boisd. Ind. Méth.* 163, 1311. *Herr.-Schæff. Schmett. Eur.* ii. pl. 92, f. 262.

Sarepta.

a. Europe. From M. Becker's collection.

5. Heliothis Rhodites.

Alæ anticæ purpurascente-roseæ, maculis tribus longitudinalibus luteo-albis; posticæ subcinereæ, purpureo micantes.

Heliothis Rhodites, *Eversmann, Bull. Soc. Imp. Nat. Mosc.* 1851, xxiv. N, 2, 635, 22.

Sarepta. Southern and eastern borders of the Black Sea.

6. Heliothis peltigera.

Pallide cervina; abdomen basi albidum; alæ anticæ fascia lata plagaque postica interiore obscurioribus, maculis duabus guttisque costalibus nigro-cinereis, puncto postico submarginali atro, macula parva basim versus subochracea; posticæ albidæ, lunula discali margineque latissimo nigricantibus.

——— ———, *Engr. Pap. d'Eur.* 555, a.
Noctua peltigera, *Wien. Verz.* 89, 2. *Hübn. Eur. Schmett. Noct.* pl. 63, f. 300. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 119, f. 5. *Frey. Beit.* ii. pl. 167.
Noctua Barbara, *Fabr. Ent. Syst.* iii. 2, 111, 334. *Coqueb. Ill. Icon.* pl. 17, f. 3.
Noctua Florentina, *Esp. Schmett.* iv. pl. 135, f. 2.
Noctua scutigera, *Bork. Eur. Schmett.* iv. 93, 37.
Noctua straminea, *Donov. Brit. Ins.* ii. pl. 61.
Heliothis peltigera, *Treit. Schmett.* v. 227, 5. *Steph. Ill. Brit. Ent. Haust.* iii. 109. *Boisd. Ind. Méth.* 163, 1307. *Guen. Noct.* ii. 180, 931.
Phalæna-Noctua Alphea, *Cram. Pap. Exot.* iii. 99, pl. 250, f. F.
Melicleptria peltigera, *Hübn. Verz. Schmett.* 262, 2576.
Melicleptria Alphea, *Hübn. Verz. Schmett.* 262, 2577
Heliothisa peltigera, *Meig. Syst. Besch.* iii. 234, pl. 1

a—d. England. From Mr. Stephens' collection.
e, f. England.
g. Devonshire. Presented by W. Raddon, Esq.
h. South Africa. From Mr. Argent's collection.
i. South Africa. Presented by Dr. A. Smith.
j. Nepaul. Presented by the Entomological Club.
k. North Bengal. Presented by W. W. Saunders.
l—n. Cape. From M. Dregé's collection.
o. New Zealand. Presented by Dr. Sinclair.
p. Sicily. From Mr. Melly's collection.
q, r. Europe. From M. Becker's collection.
s, t. Gibraltar. From Mr. Milne's collection.

Var.? *Straminea; alæ anticæ maculis marginalibus et submarginalibus guttisque discalibus ferrugineis, fascia exteriore sordide straminea, margine fusco; posticæ testaceæ, macula guttaque discalibus fasciaque lata exteriore maculam testaceam includente ferruginea.*

Phalæna Charmione, *Stoll, Cram. Pap. Exot.* v. 162, pl. 36, f. 10.

Cape.

7. Heliothis armigera.

Pallide cervina; alæ anticæ fuscescente plus minusve fasciatæ et nebulosæ, orbiculari et reniformi nigricantibus; posticæ pallidiores, litura discali margineque latissimo sæpe excavato nigricantibus.

Noctua armigera, *Hübn. Noct.* pl. 79, f. 370. *Dup. Pap. de France*, vii. 310, pl. 119, f. 5, 6. *Frey. Beit.* iii. pl. 203.
Heliothis armigera, *Treit. Schmett. von Eur.* iii. 230, 6. *Boisd. Faun. Ent. Mad. Bomb. et Maur. Lép.* 98, 1; *Ind. Méth.* 163, 1308. *Guen. Noct.* ii. 181, 933.
Heliothisa armigera, *Meig. Syst. Besch.* iii. 234, 22, pl. 120, f. 15.

Europe. Africa. Madagascar. Mauritius. Bengal.

a. England. From Mr. Stephens' collection.
b. England.
c. Europe. From M. Becker's collection.
d, *e*. Gibraltar. From Mr. Milne's collection.
f, *g*. Navigator's Isles.
h. Moreton Bay. Presented by — Gibbons, Esq.
i. New Zealand. Presented by Dr. Sinclair.
j. New Zealand. Presented by the Rev. W. Colenso.
k. New Zealand. Prssented by Col. Bolton.
l. Rio Janeiro. From Mr. Stevens' collection.
m, *n*. New Zealand. From Mr. Churton's collection.
o, *p*. Port Natal. From Dr. Krauss' collection.
q—*t*. Congo. Presented by Sir J. Richardson.
v. Sidney. From Mr. Lambert's collection.
u, *w*. Nice. From Dr. Leach's collection.
x. Venezuela. From Mr. Dyson's collection.
y. Georgia. From Mr. Milne's collection.
z. Australia. Presented by J. F. Stephens, Esq.
aa. Australia. From Mr Milne's colleetion.
bb. Australia.
cc. Jamaica.
dd. South Africa. Presented by Dr. A. Smith.
ee. Interior of South Africa. Presented by the late Earl of Derby.
ff, *gg*. Cape. Presented by Dr. Horsfield.
hh. South Africa. From Mr. Pamplin's collection.
ii. Mexico. From Mr. Hartweg's collection.
jj, *kk*. North India. Presented by Gen. Hearsay.
ll. Ceylon. From the Rev. J. Wenham's collection.
mm, *nn*. Adelaide. Presented by the Entomological Club.
oo. ———? From Mr. Milne's collection.
pp. ———?

8. Heliothis dipsacea.

Cervina; alæ anticæ lineis indistinctis angulosis, punctis fasciaque media obliqua arcuata fuscescentibus, guttis marginalibus nigricantibus; posticæ nigricantes, striga basali, fascia irregulari, macula marginali ciliisque testaceo-albidis.

——— ———, *Merian, Ins. Eur.* ii. pl. 49. *Engr. Pap. d'Eur.* 553, a, c. *Schæff. Icon. Ins. Ratisb.* ii. pl. 173.

Phalæna-Noctua dipsacea, *Linn. Syst. Nat.* 856, 185. *Gmel. ed. Syst. Nat.* i. 5, 2553, 185.

Noctua dipsacea, *Wien. Verz.* 89, 3. *Fabr. Sp. Ins.* ii. 217, 45; *Mant. Ins.* ii. 143, 65; *Ent. Syst.* iii. 2, 33, 83. *Esp. Schmett.* iv. pl. 172, f. 1—3; pl. 185, f. 1—6. *Bork. Eur. Schmett.* iv. 89, 35. *Hübn. Eur. Schmett. Noct.* pl. 63, f. 311. *Dup. Hist. Nat. Lép. Fr.* vii. 304, pl. 119, f. 2. *Schr. Faun. Boic.* 1587. *Scriba, Beit.* pl. 12, f. 3—5. *Brahm, Ins.* 399. *Donov. Brit. Ins.* x. pl. 327.

Heliothis dipsacea, *Treit. Schmett.* v. 220, 3. *Steph. Ill. Brit. Ent. Haust.* iii. 109. *Boisd. Ind. Méth.* 163, 1305. *Guen. Noct.* ii. 181, 934.

Melicleptria dipsacea, *Hübn. Verz. Schmett.* 262, 2578.

Heliothisa dipsacea, *Meig. Handb.* 183, 94; *Syst. Besch.* iii. 231, 16, pl. 120, f. 12.

a. England.
b, *c*. England. From Mr. Stephens' collection.
d—*f*. England. From Mr. Milne's collection.
g, *h*. Hungary. From Mr. Milne's collection.
i. ———? Presented by the Entomological Club.
j. ———?

9. Heliothis Ononidis.

Fusco-cinerea; alæ anticæ striga basali, maculis duabus discalibus fasciisque duabus exterioribus nigro-fuscis; posticæ nigricantes, maculis tribus ciliisque sordide albidis.

——— ———, *Engr. Pap. d'Eur.* 554, a, b, d, e.

Noctua Ononidis, *Wien. Verz.* 89, 4. *Fabr. Mant. Ins.* ii. 143, 66; *Ent. Syst.* iii. 2, 34, 84. *Esp. Schmett.* iv. pl. 172, f. 4—6 *Bork. Eur. Schmett.* iv. 87, 34. *Hübn. Eur. Schmett. Noct.* pl. 63, f. 312. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 119, f. 3.

Melicleptria Ononis, *Hübn. Verz. Schmett.* 262, 2579.

Heliothisa Ononis, *Meig. Syst. Besch.* iii. 230, 15, pl. 120, f. 13.

Heliothis Ononidis, *Treit. Schmett.* v. 217, 2. *Boisd. Ind. Méth.* 162, 1304. *Eversm. Faun. Volg-Ural.* 326. *Guen. Noct.* ii. 182, 935.

Phalæna-Noctua Ononidis, *Gmel. ed. Syst. Nat.* i. 5, 2554, 1098.

a, *b*. Europe. From M. Becker's collection.

10. Heliothis scutosa.

Cinerascens; alæ anticæ cinereo-fuscescentes, fascia repanda, lineis submarginali venisque albidis, maculis discalibus maximis nigro marginatis, lunulis marginalibus nigris albo extus marginatis; posticæ albidæ, macula lineaque discalibus margineque lato exciso fuscis.

——— ———, *Engr. Pap. d'Eur.* 552, a, b.

Noctua scutosa, *Wien. Verz.* 89, 1. *Fabr. Mant. Ins.* ii. 142, 63; *Ent. Syst.* iii. 2, 33, 81. *Esp. Schmett.* iv. pl. 108, f. 1, 2. *Bork. Eur. Schmett.* iv. 84, 33. *Hübn. Eur. Schmett. Noct.* pl. 63, f. 309. *Dup. Hist. Nat. Lép. Fr.* vii. 301, pl. 119, f. 1. *Frey. Beit.* ii. pl. 191.

Phalæna-Noctua scutosa, *Gmel. ed. Syst. Nat.* i. 5, 2550, 1079.

Melicleptria scutosa, *Hübn. Verz. Schmett.* 262, 2575.

Heliothis scutosa, *Treit. Schmett.* v. 224, 4. *Curt. Brit. Ent.* pl. 595. *Boisd. Ind. Méth.* 163, 1306. *Guen. Noct.* ii. 182, 936.

Heliothisa scutosa, *Meig. Syst. Besch.* v. 231, 17, pl. 120, f. 11.

a. England. From Mr. Stephens' collection.
b. Ukraine. Presented by Dr. Dowler.
c, *d*. Europe. From M. Becker's collection.

North America.

11. Heliothis Spinosæ.

Var.? *Fusco-cuprea; abdomen cinerascens; alæ anticæ apud medium albidæ, lineis transversis undulatis albis, orbiculari et reniformi maximis, guttis marginalibus nigris oblongis albido marginatis; posticæ pallidæ, litura discali margineque cupreis.*

Heliothis Spinosæ, *Guen. Noct.* ii. 182, 937.

Canada.

a—*c*. North America? Presented by the Entomological Club.

12. Heliothis pyralis.

Mas. *Flava; caput, thorax et alarum margines lati apicales rufescentia; alæ guttis submarginalibus albis, anticæ maculis anticis rufescentibus.*

Hemeroplanis pyralis (Noctua semigeometra, Heliothis alacris), *Hübn. Samml. Exot. Schmett.* i. 23, 64, f. 127, 128.

Georgia or Florida.

13. Heliothis expedimens.

Mas. *Cervina; abdomen pallidum; alæ anticæ apud medium obscuriores, lineis transversis angulosis ferrugineis, lineis medianis nigricantibus undulatis, orbiculari et reniformi magnis ferrugineo marginatis; posticæ testaceæ, litura discali nigricante, margine lato nigro-cupreo.*

Male. Fawn-colour. Abdomen paler than the thorax. Fore wings with transverse angular ferruginous lines; median lines blackish, undulating, more distinct than the others, and with the adjoining part of the wing darker than the latter elsewhere; orbicular and reniform spots large, with ferruginous borders. Hind wings testaceous, with a blackish discal mark and broad blackish cupreous borders, which have a brighter cupreous margin. Length of the body 6½ lines; of the wings 15 lines.

a. Orilla, West Canada. From Mr. Bush's collection.
b. Canada.

South America.

14. Heliothis cilisca.

Ferruginea, H. marginatæ *affinis; alæ anticæ minus obscuræ, rufo magis conspersæ, lineis et macularum marginibus magis rufis, fascia purpureo-fusca submarginali e lunulis magis constricta, spatio marginali concolore; posticæ fascia rufescente.*

Heliothis cilisca, *Guen. Noct.* ii. 179, 929.

Brazil.

15. Heliothis Gossypii.

Cervino-testacea; abdomen nigricans, fasciis testaceis; alæ anticæ lineis transversis angulosis nigris, macula discali nonnunquam alba; posticæ albidæ, margine cinereo.

Phalæna-Noctua Gossypii, *Anon. Ins. Surinam*, i. 53, pl. 23.

Surinam.

Africa.

16. Heliothis scutuligera.

Pallide cervina; alæ anticæ macula orbiculari obsoleta, reniformi magna nigricante, linea submarginali vaga nigricante pallide punctata, ciliis longis squamosis linea nigricante; postica margine lato nigricante e macula rotundata interrupto.

Heliothis scutuligera, *Guen. Noct.* ii. 180, 932.

Cape.

17. Heliothis pulverosa.

Mas. *Subtestaceo-cinerea, fusco subconspersa; alæ anticæ margine interiore fasciaque exteriore cinereo-fuscis, lineis transversis undulatis valde indistinctis, lituris costalibus fuscis, guttis marginalibus nigris minimis, orbiculari et reniformi fuscis indistinctis; posticæ albidæ, litura discali margineque lato æneis.*

Male. Cinereous, with a slight testaceous tinge. Thorax and fore wings slightly speckled with brown. Fore wings cinereous-brown along the interior border, and with an exterior band of the same hue; transverse lines undulating, very indistinct; costal marks brown; marginal dots black, very minute; orbicular and reniform spots brown, indistinct. Hind wings whitish; discal mark and borders æneous, the latter broad. Length of the body 8 lines; of the wings 16 lines.

a. Cape. From M. Dregé's collection.

18. Heliothis definiens.

Mas. *Cinerea; abdomen fuscescens; alæ anticæ lineis transversis undulatis indistinctis fuscescentibus albido marginatis, costa lituris fuscescentibus et albidis, guttis marginalibus nigris lunatis pallido marginatis, linea submarginali e strigis indistinctis fuscis, claviformi orbiculari et reniformi distinctis fusco marginatis, orbiculari albido annulata; posticæ pallide cinereæ, margine latissimo æneo-fusco, ciliis albis.*

Male. Cinereous. Abdomen brownish except at the base. Fore wings with the transverse lines undulating, indistinct, brownish, with whitish borders; costa with brownish and whitish marks; marginal dots black, lunate, with pale borders; submarginal line represented by indistinct brown streaks; claviform, orbicular, and reniform spots distinct, with brown borders; orbicular with an inner whitish border, a little less than half the size of the reniform. Hind wings pale cinereous, with very broad æneous-brown borders; ciliæ white. Length of the body 5½ lines; of the wings 13 lines.

a. South Africa. Presented by Dr. A. Smith.

Asia.

19. Heliothis flava.

Alæ flavæ; anticæ fusco striatæ, macula mediana nigra; posticæ fascia submarginali nigra; alæ subtus fascia submarginali nigra, anticæ maculis duabus nigris.

Heliothis flava, *Bremer und Grey, Beit. zur Schmett. Fauna des Nordlichen China's*, 18, 94.

North China.

20. Heliothis temperata.

Fœm. *Testacea; alæ anticæ lineis transversis angulosis nigricantibus, exteriore duplicata, fascia exteriore cinereo-fusca, linea submarginali distincta, orbiculari et reniformi valde indistinctis; alæ posticæ margine lato cinereo-fusco ex parte excavato.*

Male. Testaceous. Fore wings with transverse angulose blackish lines, the exterior one double, and having between it and

the distinct submarginal line a grayish-brown band; orbicular and reniform spots very indistinct. Hind wings with broad grayish brown borders, which are partly excavated on the exterior side. Length of the body 5½ lines; of the wings 13 lines.

Hindostan. In Mr. Saunders' collection.

New Zealand.

21. Heliothis conferta.

Mas et fœm. *Cervina; abdomen testaceum; alæ anticæ lineis transversis undulatis nigricantibus, exteriore fasciaque indistincta cinerascente contiguis, guttis marginalibus nigris minimis, orbiculari et reniformi discis marginibusque nigricantibus; posticæ albido-testaceæ, litura discali margineque lato nonnunquam excavato æneo-fuscis.*

Male and female. Pale or bright fawn-colour. Abdomen testaceous. Fore wings with transverse undulating blackish lines, the exterior one double, and contiguous to an indistinct grayish band; marginal dots black, very minute; orbicular and reniform spots with blackish disks and borders, the former much smaller than the latter. Hind wings whitish testaceous, with broad æneous-brown borders, which are occasionally excavated on the exterior side; discal mark of the same hue. Length of the body 7 lines; of the wings 16 lines.

a—c. New Zealand. Presented by Dr. Sinclair.
d. New Zealand. Presented by Col. Bolton.

Oceania.

22. Heliothis assueta.

Alæ anticæ læte fulvæ, subdentatæ, apud marginem exteriorem obscuriores, lineis parallelis undulatis nigricantibus bene determinatis, duabus medianis remotis duplicatis, extrabasilari angulosa, umbra mediana tenui, linea submarginali vaga nigricante apud medium angulata, orbiculari et reniformi annularibus obscurioribus apud medium guttatis; posticæ concolores, margine lato nigro.

Heliothis assueta, *Guen. Noct.* ii. 178, 928.

Otaheite.

23. Heliothis separata.

Fœm. *Testacea; alæ anticæ lineis transversis angulosis fuscis, exteriore duplicata, fascia exteriore cuprea, linea submarginali distincta, orbiculari et reniformi incompletis indistinctis; posticæ margine lato cupreo.*

Female. Testaceous. Fore wings with transverse angulose brown lines, of which the exterior one is double and inclosed in a cupreous band; submarginal line distinct; orbicular and reniform spots incomplete, indistinct. Hind wings with a broad cupreous border. Length of the body 6 lines; of the wings 14 lines.

a. Navigator's Isles.

Country unknown.

24. Heliothis punctifera.

Pallide cervina; thorax fasciis pallidioribus et obscurioribus; abdomen testaceum; alæ anticæ lineis transversis undulatis ferrugineis, exteriore lineaque albida guttulari conjunctis, costa lituris nigricantibus et albidis, claviformi, orbiculari et reniformi distinctis, reniformis disco nigro; posticæ albidæ, litura discali margineque lato æneis.

Pale fawn-colour. Thorax with paler and darker bands. Abdomen testaceous. Fore wings with transverse undulating ferruginous lines, of which the exterior one is accompanied on its outer side by a row of whitish dots; submarginal line indistinct; marginal dots black, with whitish dots on the inner side; costa with blackish and whitish marks, claviform, orbicular and reniform spots distinct, the two former together not larger than the latter, which has a blackish disk. Hind wings whitish; discal mark æneous, as is also the broad border. Length of the body 5½ lines; of the wings 13 lines.

a, b. ———? Presented by the Entomological Club.

Genus 10. ANTHŒCIA.

Statura plerumque parva. Corpus sat gracile. Proboscis mediocriter longa. Palpi breves, pilosi, sat graciles, caput non superantes; articulus 3us minimus, 2i quadrante non longior. Antennæ simplices, corporis dimidio paullo longiores. Pedes graciles; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter

the distinct submarginal line a grayish-brown band; orbicular and reniform spots very indistinct. Hind wings with broad grayish brown borders, which are partly excavated on the exterior side. Length of the body 5½ lines; of the wings 13 lines.

Hindostan. In Mr. Saunders' collection.

New Zealand.

21. Heliothis conferta.

Mas et fœm. *Cervina; abdomen testaceum; alæ anticæ lineis transversis undulatis nigricantibus, exteriore fasciaque indistincta cinerascente contiguis, guttis marginalibus nigris minimis, orbiculari et reniformi discis marginibusque nigricantibus; posticæ albido-testaceæ, litura discali margineque lato nonnunquam excavato æneo-fuscis.*

Male and female. Pale or bright fawn-colour. Abdomen testaceous. Fore wings with transverse undulating blackish lines, the exterior one double, and contiguous to an indistinct grayish band; marginal dots black, very minute; orbicular and reniform spots with blackish disks and borders, the former much smaller than the latter. Hind wings whitish testaceous, with broad æneous-brown borders, which are occasionally excavated on the exterior side; discal mark of the same hue. Length of the body 7 lines; of the wings 16 lines.

a—c. New Zealand. Presented by Dr. Sinclair.
d. New Zealand. Presented by Col. Bolton.

Oceania.

22. Heliothis assueta.

Alæ anticæ læte fulvæ, subdentatæ, apud marginem exteriorem obscuriores, lineis parallelis undulatis nigricantibus bene determinatis, duabus medianis remotis duplicatis, extrabasilari angulosa, umbra mediana tenui, linea submarginali vaga nigricante apud medium angulata, orbiculari et reniformi annularibus obscurioribus apud medium guttatis; posticæ concolores, margine lato nigro.

Heliothis assueta, *Guen. Noct.* ii. 178, 928.

Otaheite.

23. Heliothis separata.

Fœm. *Testacea; alæ anticæ lineis transversis angulosis fuscis, exteriore duplicata, fascia exteriore cuprea, linea submarginali distincta, orbiculari et reniformi incompletis indistinctis; posticæ margine lato cupreo.*

Female. Testaceous. Fore wings with transverse angulose brown lines, of which the exterior one is double and inclosed in a cupreous band; submarginal line distinct; orbicular and reniform spots incomplete, indistinct. Hind wings with a broad cupreous border. Length of the body 6 lines; of the wings 14 lines.

a. Navigator's Isles.

Country unknown.

24. Heliothis punctifera.

Pallide cervina; thorax fasciis pallidioribus et obscurioribus; abdomen testaceum; alæ anticæ lineis transversis undulatis ferrugineis, exteriore lineaque albida guttulari conjunctis, costa lituris nigricantibus et albidis, claviformi, orbiculari et reniformi distinctis, reniformis disco nigro; posticæ albidæ, litura discali margineque lato æneis.

Pale fawn-colour. Thorax with paler and darker bands. Abdomen testaceous. Fore wings with transverse undulating ferruginous lines, of which the exterior one is accompanied on its outer side by a row of whitish dots; submarginal line indistinct; marginal dots black, with whitish dots on the inner side; costa with blackish and whitish marks, claviform, orbicular and reniform spots distinct, the two former together not larger than the latter, which has a blackish disk. Hind wings whitish; discal mark æneous, as is also the broad border. Length of the body 5½ lines; of the wings 13 lines.

a, b. ———? Presented by the Entomological Club.

Genus 10. ANTHŒCIA.

Statura plerumque parva. Corpus sat gracile. Proboscis mediocriter longa. Palpi breves, pilosi, sat graciles, caput non superantes; articulus 3us minimus, 2i quadrante non longior. Antennæ simplices, corporis dimidio paullo longiores. Pedes graciles; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter

latæ sat angustæ, apud costam rectæ, apice rotundatæ, margine exteriore subobliquo aut sat obliquo.

Trypana, *Guen. Ann. Soc. Ent. Fr.* x. 58.
Anthœcia, *Boisd. Ind. Méth.* 162. *Dup. Guen. Noct.* ii. 183.
Heliothis, p., *Ochs.; Treit.*
Melicleptria, p., *Hübn. Verz. Schmett.* 262.

Size generally small. Body rather slender. Proboscis moderately long. Palpi short, pilose, rather slender, not extending beyond the head; third joint very small, not one-fourth of the length of the second. Antennæ simple, a little more than half the length of the body. Legs slender; hind tibiæ with long spurs. Fore wings moderately broad or rather narrow, straight in front, rounded at the tips, slightly or rather oblique along the exterior border.

Europe.

1. Anthœcia Cora.

Cupreo-fusca, subtus pallida; alæ anticæ fasciis duabus diffusis nigro-fuscis, lineis duabus valde undulatis albidis, macula costali subapicali nigra; posticæ luteæ, basi margineque lato fuscis, ciliis pallidis.

Anthœcia Cora, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837; *Faun. Volg-Ural.* 324. *Dup. Suppl.* iv. 227, pl. 70. *Guen. Noct.* ii. 185, 941. *Herr.-Schæff. Schmett. Eur.* ii. pl. 49, f. 246, 247.

South Russia.

a—d. Europe. From M. Becker's collection.

2. Anthœcia pulchra.

Cinerea; abdomen nigricans, segmentorum marginibus albidis; alæ anticæ purpureæ, fascia margineque exteriore purpurascente-cinereis, illa albido marginata; posticæ nigro-cupreæ, maculis duabus discalibus ciliisque albis.

Anthœcia pulchra, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842; *Faun. Volg-Ural.* 326. *Dup. Suppl.* iii. 524, pl. 90. *Guen. Noct.* ii. 186, 945. *Herr.-Schæff. Schmett. Eur.* ii. pl, 43, f. 217, 218.

Ural Region.

a, b. Europe. From M. Becker's collection.

3. Anthœcia Dos.

Cervina; abdomen nigro-cinereum, albo marginatum; alæ anticæ angustæ, lanceolatæ; posticæ nigræ, fascia ciliisque albis.

Noctua Dos, *Frey. Beit.* iii. 98, pl. 263, f. 4.
Anthœcia Dos, *Guen. Noct.* ii. 187, 946. *Herr.-Schæff. Schmett. Eur.* ii. pl. 55, f. 274, 275.

Constantinople.

4. Anthœcia cognata.

Cervina, subtus albido-testacea; abdomen nigricans; alæ anticæ fascia discali antice divisa fasciaque tenui submarginali albido-testaceis; posticæ nigræ, fascia ciliisque albidis.

Noctua cognata, *Geyer, Schmett.* f. 828. *Frey.* ii. pl. 110; *Beitr.* 134, pl. 135, f. 3.
Heliothisa cognata, *Meig. Syst. Besch.* iii. 230, 14, pl. 120, f. 9; pl. 121, f. 3.
Heliothis cognata, *Treit. Suppl.* 142. *Dup. Suppl.* iii. 434, pl. 38, f. 4.
Anthœcia cognata, *Boisd. Ind. Méth.* 162, 1301. *Guen. Noct.* ii. 187, 947.

Hungary.

a—e. Europe. From M. Becker's collection.

5. Anthœcia Cardui.

Cervina, subtus albido-testacea; abdomen nigricans; alæ anticæ fascia discali antice divisa fasciaque tenui submarginali albido-testaceis; posticæ nigræ, fasciaque ciliisque albidis.

Noctua Cardui, *Esp. Schmett.* iv. pl. 191, f. 2, 3. *Hübn. Eur. Schmett. Noct.* pl. 64, f. 313. *Dup. Hist. Nat. Lép. Fr.* vii. 311, pl. 119, f. 4. *Frey. Beit.* ii. pl. 110.
Melicleptria Cardui, *Hübn. Verz. Schmett.* 262, 2580.
Heliothis Cardui, *Treit. Schmett.* v. 216, 1.
Heliothisa Cardui, *Meig. Syst. Besch.* iii. 229, 13, pl. 120, f. 10.
Anthœcia Cardui, *Boisd. Ind. Méth.* 162, 1302. *Eversm, Faun. Volg-Ural.* 325. *Guen. Noct.* ii. 187, 948.

a—d. Europe. From M. Becker's collection.

6. Anthœcia rivulosa.

Alæ anticæ viridescente-cinereæ, pulverosæ, spatiis basilari et submarginali olivaceo nigricantibus, lineis optime determinatis, duabus medianis albis integris, submarginali vaga subrecta, macula reniformi e litura obscura vaga; posticæ saturate cinereæ, subtus albidæ.

Anthœcia rivulosa, *Guen. Noct.* ii. 184, 938.

North America.

7. Anthœcia arcigera.

Carneo-cinerea; alæ anticæ spatiis basali et subterminali ferrugineo-fuscis, spatii mediani dimidio nigricante, lineis medianis albis angustis integris bene determinatis, strigis nigris marginalibus; posticæ nigricantes, ciliis pallidioribus.

Anthœcia arcigera, *Guen. Noct.* ii. 184, 939.

North America.

8. Anthœcia Jaguarina.

Rufescens, magna; alæ anticæ linea 1a valde arcuata, umbra mediana maculaque reniformi olivaceis, lineis duabus medianis pallidis extus olivaceo late nebulosis, linea submarginali subobsoleta, litura costali subapicali obscura; posticæ fulvescentes, striga basali maculaque discali conjunctis margineque lato nigris.

Anthœcia Jaguarina, *Guen. Noct.* ii. 184, 940.

North America.

9. Anthœcia Lynx.

Luteo-testacea; alæ anticæ cupreo-ferruginea, fasciis duabus diffusis incompletis margineque exteriore testaceis; posticæ luteæ, lunula discali margineque lato nigris connexis, ciliis albidis.

Anthœcia Lynx, *Guen. Noct.* ii. 185, 942.

North America.

a, *b*. New York. Presented by E. Doubleday, Esq.
c. New York. From Mr. Milne's collection.
d. ——— ?

10. ANTHŒCIA TUBERCULUM.

Fœm. *Nigro-fusca, flavo varia; alæ flavo ciliatæ; anticæ guttis basalibus, macula antica media fasciisque duabus undulosis postmediis, 1a postice furcata, flavis; posticæ macula basali flava.*

Melicleptria tuberculum (Noctua semigeometra, Heliothis celetis), *Hübn.* Samml. *Exot. Schmett.* iii. 29, 269, f. 517, 518.

Anthœcia tuberculum, *Guen. Noct.* ii. 185, 943.

Pennsylvania.

11. ANTHŒCIA BINA.

Abdomen fasciatum; alæ anticæ rufescente-fuscæ, extus obscure olivaceo-flavæ, subtus nigro flavo ferrugineoque variæ, lineis medianis subobsoletis apud costam albidis; posticæ nigræ, maculis duabus ciliisque flavis.

Anthœcia bina, *Guen. Noct.* ii. 186, 944.

North America.

Country unknown.

12. ANTHŒCIA DORSILUTEA.

Lutea; antennæ fuscæ; abdomen supra nigrum, segmentorum marginibus posticis testaceis; alæ anticæ cervinæ, fasciis duabus pallidioribus testaceo marginatis, macula interiore testacea; posticæ cupreo-fuscæ, maculis duabus luteis, ciliis albidis.

Luteous. Antennæ brown. Abdomen black above, with a testaceous band on the hind border of each segment. Fore wings fawn-colour, with two paler bands, which have testaceous borders; a testaceous spot between the base and the first band, which is broad and undulating; second band marginal. Hind wings dark cupreous-brown, with two luteous spots at the base, and with whitish ciliæ. Length of the body 3½—4 lines; of the wings 9—10 lines.

a, b. ———?

Genus 11. JANTHINEA.

Statura parva. Corpus pilosum, sat validum. Proboscis mediocriter longa. Palpi pilosi, oblique ascendentes, longiusculi;

articulus 3us cylindricus, 2i dimidio longior. Antennæ simplices, corporis dimidio multo longiores. Abdomen alas posticas non superans. Pedes validi; tibiæ posticæ calcaribus longis. Alæ anticæ apud costam rectæ, apice acutæ, margine exteriore perobliquo.

Janthinea, *Guen. Noct.* ii. 188.
Heliothis, p., *Boisd.*
Anthœcia, p., *Duponch.*

Size small. Body pilose, moderately stout. Proboscis moderately long. Palpi pilose, obliquely ascending, rather long; third joint cylindrical, more than half the length of the second. Antennæ simple, much more than half the length of the body. Abdomen not extending beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Fore wings straight in front, acute at the tips, very oblique along the exterior border.

This genus has some affinities with the *Pyralites*.

1. Janthinea Friwaldszkii.

Cinerea; abdomen nigrum; alæ fascia obliqua ciliisque albis; anticæ cyaneæ fasciis nigris; posticæ nigræ.

Heliothis Friwaldszkii, *Treits.; Duponch. Ann. Soc. Ent. Fr.* iv. 633, pl. 18, B, f. 2, 3. *Boisd. Ind. Méth.* 162, 1303. *Herr.-Schæff. Schmett. Eur.* ii. pl. 43, f. 215, 216.
Noctua Viola, *Frey. Beit.* iii. pl. 201, f. 4.
Janthinea Friwaldszkii, *Guen. Noct.* ii. 188, 949.

Mount Balkan, Turkey.

a. Europe. From Dr. Frivaldsky's collection.

Genus 12. ANARTA.

Corpus pilosum, sat validum. Proboscis mediocriter longa. Palpi porrecti, plus minusve pilosi, caput paullo superantes; articulus 3us conicus, minimus. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ anticæ mediocriter latæ, apud costam rectæ, apice rotundatæ, margine exteriore subobliquo.

Anarta, Sympistis, Acolasis, p., et Odice, p., *Hübn. Verz. Schmett.* 256, 257, 261.
Anarta, *Ochs.; Treits.; Steph.; Boisd.; Guen.; Herr.-Schæff.*

Body pilose, moderately stout. Proboscis moderately long. Palpi porrect, more or less pilose, extending a little beyond the head; third joint conical, very minute. Antennæ simple, more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Fore wings moderately broad, straight in front, rounded at the tips, very slightly oblique along the exterior border.

Group 1.

Corpus pilosissimum. Alæ nigricantes, cinereo alboque plus minusve variæ.

Body very pilose. Wings blackish, more or less varied with gray or white.

Inhabitants of the Polar regions, or of the summits of the Alps.

Europe.

1. Anarta melanopa.

Nigro-cinerea; alæ anticæ cinereæ, annulis duobus discalibus lineisque transversis duplicatis undulosis nigris, ciliis albo intercisis; posticæ nigricantes, ciliis albis. Fœm.—*Alæ posticæ lunula discali albida.*

Noctua melanopa, *Beck. Thunb.* 1791, 42.
Noctua tristis, *Hübn. Eur. Schmett. Noct.* f. 446. *Dup. Hist. Nat. Lép. Fr.* vii. 297, pl. 118.
Noctua rupestris, *Hübn. Noct.* f. 644 (mas.).
Sympistis tristis, *Hübn. Verz. Schmett.* 202, 2572.
Sympistis rupestris, *Hübn. Verz. Schmett.* 202, 2573.
Anarta vidua, *Treit. Schmett.* v. 207.
Noctua vidua, *Frey. Beit.* iv. pl. 311, f. 3.
Anarta melanopa, *Boisd. Ind. Méth.* 161, 1296. *Guen. Noct.* ii. 190, 950. *Herr.-Schæff. Schmett. Eur.* ii. pl. 84, f. 433, 434.

Lapland. Swiss Alps.

a—h. Scotland. From Mr. Stephens' collection.
i, j. Scotland. From Mr. Stevens' collection.
k, l. Scotland. From Mr. Foxcroft's collection.

2. Anarta vidua.

Nigro-cinerea; alæ anticæ lineis transversis undulatis, macularum marginibus strigisque submarginalibus nigris cano marginatis; posticæ albæ, macula discali lunata margineque lato nigris, ciliis albis.

Noctua vidua, *Hübn. Eur. Schmett. Noct.* pl. 86, f. 403.
Sympistis vidua, *Hübn. Verz. Schmett.* 262, 2571.
Anarta vidua, *Guen. Noct.* ii. 190, 951.

Lapland.

3. Anarta funebris.

Obscure cinerea; alæ anticæ fascia media nigricante antice obsoleta lineis duabus undulatis nigris inclusa, linea submarginali pallide cinerea; posticæ nigricantes, litura discali nigra, ciliis albis.

Noctua funebris, *Hubn. Eur. Schmett. Noct.* pl. 92, f. 433. *Dup. Hist. Nat. Lép. Fr.* vii. 289, pl. 118, f. 5.
Acolasis funebris, *Hübn. Verz. Schmett.* 256, 2524.
Anarta funebris, *Treit. Schmett.* v. 209. *Boisd. Ind. Méth.* 161, 1297. *Herr.-Schæff. Schmett. Eur.* ii. pl. 42, f. 209, 210. *Guen. Noct.* ii. 191, 952.
Heliothisa funebris, *Meig. Syst. Besch.* iii. 228, 9, pl. 119, f. 4.
Anarta nigrita, *Boisd. Ind. Méth.* 161, 1298.

Swiss Alps.

4. Anarta amissa.

Mas. *Alæ anticæ nigræ, cinereo albidoque irroratæ, fimbria alba nigro intersecta; posticæ subatræ, ciliis albis.* Fœm.—*Alæ anticæ fuliginosæ, fascia media nigra, fimbria nigricante cinereo intersecta; posticæ atræ, ciliis albis.*

Anarta amissa, *Lefebvre, Ann. Soc. Ent. Fr.* v. 397, pl. 10, f. 6, 7. *Dup. Suppl.* iii. 598, pl. 49, f. 7. *Boisd. Ind Méth.* 161, 1295. *Herr.-Schæff. Schmett. Eur.* ii. pl. 42, f. 211, 212. *Guen. Noct.* ii. 192, 953.

a—c. West Greenland. Presented by M. Boie.
d. Lapland. Presented by M. Drewsen.

5. Anarta quieta.

Nigro-cinerea; alæ anticæ lineis transversis angulosis et macularum annulis albidis nigro marginatis, ciliis albido notatis; posticæ cinereæ, fasciis duabus exterioribus albidis, una nigra marginata, altera nigro notata, ciliis albidis.

Noctua quieta, *Hübn. Eur. Schmett. Noct.* f. 485.
Odice quieta, *Hübn. Verz. Schmett.* 258, 2542.
Anarta quieta, *Guen. Noct.* ii. 193, 955.

Lapland.

6. Anarta melaleuca.

Nigra; abdominis latera albida; alæ anticæ fasciis strigosis, maculis et ciliarum guttis albidis, reniformi nigro notata; posticæ albæ, gutta discali margineque lato atris, ciliis albis.

Phalæna-Noctua Myrtilli, *Linn. Syst. Nat.* 853, 167.
Noctua melaleuca, *Beck. Thunb.* 1791, 42, f. 12.
Noctua leucoptera, *Esp. Schmett.* iv. pl. 189, f. 3.
Noctua mœsta, *Hübn. Eur. Schmett. Noct.* pl. 77, f. 357. *Dup. Hist. Nat. Lép. Fr.* vii. 291, pl. 118, f. 3.
Anarta melaleuca, *Treit. Schmett.* v. 205, 3. *Boisd. Ind. Méth.* 161, 1293. *Guen. Noct.* ii. 193, 956.
Heliothisa melaleuca, *Meig. Syst. Besch.* iii. 225, 4, pl. 119, f. 2.
Sympistis melaleuca, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iv *Noct.* iii. *Semigeometræ*, iv. *Heliothentes D. Celetes*, i. f. 14; *Verz. Schmett.* 261, 2570.

Lapland.

7. Anarta algida.

Alæ anticæ fuliginoso alboque variæ, strigis duabus nigro dentatis maculis ordinariis obsoletis, fimbria nigra albo intersecta; posticæ albidæ, puncto fasciaque terminali atris, ciliis albis.

Anarta algida, *Lefebvre, Ann. Soc. Ent. Fr.* v. 395, pl. 10, f. 5. *Dup. Suppl.* iii. 596, pl. 49. *Boisd. Ind. Méth.* 161, 1294. *Herr.-Schæff. Schmett. Eur.* ii. pl. 78, f. 400. *Guen. Noct.* ii. 192, 954.

Lapland. Greenland.

a. Lapland. Presented by M. Drewsen.

This species is distinguished from the following by the more regular exterior lines of the fore wings.

North America.

8. Anarta Richardsoni.

Cinereo-fusca; thorax cano fasciatus; alæ anticæ lineis undulatis nigris cano late marginatis, maculis cano nigroque ex parte marginatis, strigis exterioribus lunulisque marginalibus nigris, ciliis albo notatis; posticæ canæ, margine lato nigro-fusco, ciliis albis.

Hadena Richardsoni, *Curtis, Append. Ross. Narr. 2nd. Voy.*

a, *b*. Arctic America. Presented by Sir J. Richardson.
Arctic America. Presented by Dr. Rae.

9. Anarta impingens.

Cinereo-fusca; abdomen testaceo-fuscum; alæ anticæ lineis transversis obscure fuscis undulatis valde indistinctis, fascia media obscure fusca, orbiculari et reniformi subobsoletis, lituris costalibus pallidis; posticæ sordide testaceæ, marginibus fuscescentibus.

Cinereous-brown. Abdomen testaceous-brown. Fore wings with the transverse lines dark brown, undulating, and very indistinct; a middle band of the same hue. Orbicular and reniform spots almost obsolete; some pale marks along the costa. Hind wings dingy testaceous, with brownish borders. Length of the body 5 lines; of the wings 12 lines.

a, *b*. Rocky Mountains. Presented by the late Earl of Derby.

10. Anarta Septentrionis.

Cana, nigro varia; abdomen cinereum; alæ anticæ lineis transversis nigris incompletis, orbiculari et reniformi canis apud discos nigris; posticæ albidæ, margine lato nigricante, ciliis albidis.

Hoary, varied with black. Abdomen cinereous. Fore wings with the transverse lines black, irregular, incomplete, and mostly formed of lunules; orbicular and reniform spots hoary, with black disks. Hind wings whitish, with broad blackish borders; ciliæ whitish. Length of the body 5½ lines; of the wings 14 lines.

This species is distinguished from *A. Richardsoni* by the different structure of the exterior lines, of which the inner one is continuous to the reniform spot.

epulse Bay. Presented by Dr. Rae.

11. Anarta constricta.

Mas. *Cana; thorax et abdomen nigro fasciata; alæ anticæ strigis duabus indistinctis testaceis, lineis transversis nigris angulosis, 1a et 2a interioribus distinctis, 3a tenui maculaque orbiculari connexis, submarginali valde incompleta, lunulis marginalibus nigris magnis connexis distinctis ex maxima parte nigris, maculis duabus costalibus nigris; posticæ cinereæ, linea discali angulosa lunulisque marginalibus nigricantibus.*

Male. Hoary. Thorax and abdomen with black bands. Fore wings with two slight testaceous streaks in the disk; the first interrupted by the orbicular spot; the other hindward and nearer the base; transverse lines black, zigzag; first and second lines interior, distinct; third more slender and more angular, touching the reniform spot; fourth or submarginal one very incomplete; marginal lunules large, black, connected; orbicular and reniform spots distinct, mostly black; two black costal spots. Hind wings cinereous, with a blackish angulose discal line, and blackish marginal lunules. Length of the body 4 lines; of the wings 11 lines.

a. Arctic Coast. Lat. 67½—68. Presented by Sir J. Richardson.

12. Anarta rigida.

Mas et fœm. *Cana; thorax antice nigro fasciatus; abdomen cinereum; alæ anticæ albidæ, nigro conspersæ, fasciis tribus interioribus duabusque exterioribus nigris, his incompletis, submarginali strigosa, orbiculari et reniformi apud discos nigro conspersis, macula intermedia nigra; posticæ cinereæ, gutta discali, striga undulata lunulisque marginalibus nigricantibus.* Mas.—*Antennæ serratæ.*

Male and female. Hoary. Thorax with a black band in front. Abdomen cinereous. Fore wings whitish, speckled with black, with three interior and two exterior black bands, the latter incomplete and irregular, the submarginal one composed of streaks; orbicular and reniform spots speckled with black in the disks; a black mark between them. Hind wings cinereous; discal dot, undulating streak and marginal lunules blackish. *Male.*—Antennæ serrated. Length of the body 4—4½ lines; of the wings 11—12 lines.

a, b. Arctic Coast. Lat. 67½—68. Presented by Sir J. Richardson.

13. Anarta Brephoides.

Nigra. Mas.—*Corpus pilosissimum, ex parte cinereum; antennæ pectinatæ; alæ anticæ albo conspersæ, fasciis duabus albis, 2a exteriore angulata, maculis obsoletis; posticæ albæ, nigro marginatæ, ciliis ex parte albis.* Fœm.—*Alæ anticæ non fasciatæ?; posticæ nigræ, fascia lata discali alba.*

Black. *Male.*—Body with very long hairs, which are partly cinereous. Antennæ pectinated. Fore wings thinly and irregularly speckled with white, adorned with two white bands, the second one exterior and angular; spots obsolete. Hind wings white, with black borders; ciliæ partly white. *Female.*—Fore wings not banded? Hind wings black, with a broad white discal band. Length of the body 4—5 lines; of the wings 10—12 lines.

This species differs much from the others, and has some resemblance to the genus *Brephos.*

a—e. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

f. Fort Confidence. "Found on the ice, May 25th, 1849." Presented by Sir J. Richardson.

Group 2.

Corpus subpilosum. Alæ posticæ luteæ, nigro marginatæ.

Body slightly pilose. Hind wings luteous, with black borders.

14. Anarta cordigera.

Nigro-cinerea: alæ anticæ lineis transversis indeterminatis albidis, litura reniformi discali alba; posticæ luteæ, nigro late marginatæ.

Noctua cordigera, *Schaldt, Thunb. Mus.* 1792, 57. *Esp. Schmett.* iv. pl. 189, f. 2. *Hübn. Eur. Schmett. Noct.* pl. 147, f. 674, 675. *Dup. Hist. Nat. Lép. Fr.* vii. 289, pl. 118, f. 2.

Noctua albirena, *Hübn. Eur. Schmett. Noct.* pl. 21, f. 99.

Anarta cordigera, *Hübn. Verz. Schmett* 220, 2208. *Treit. Schmett.* v. 203, 2. *Boisd. Ind. Méth.* 161, 1292. *Guen. Noct.* ii. 194, 957.

Heliothisa cordigera, *Meig. Syst. Besch.* iii. 224, 1, pl. 119, f. 1.

Lapland. Switzerland.

a. Scotland? Presented by J. C. Dale, Esq.
b. Scotland. From Mr. Stevens' collection.
c—f. Scotland. From Mr. Foxcroft's collection.
g—m. Scotland. From Mr. Stevens' collection.
n, o. Europe. From M. Becker's collection.
p. ———?

15. ANARTA MYRTILLI.

Ferrugineo-rufa, albo varia; abdomen supra nigricans, segmentorum marginibus posticis testaceis; alæ anticæ lineis transversis angulosis albidis testaceis nigrisque, striga apud maculas discales alba, ciliis albo notatis; posticæ luteæ, nigro latissime marginatæ, ciliis albidis.

——— ———, *Roës. Ins.* iv. 85, pl. 11, f. a—c. *Sepp, Ins.* iii. pl. 29. *Engr. Pap. d'Eur.* 437, a—d.

Phalæna-Noctua Myrtilli, *Linn. Faun. Suec.* 1168. *Gmel. ed. Syst. Nat* i. 5, 2570, 167.

Noctua Myrtilli, *Wien. Verz.* 79, 23. *Fabr. Sp. Ins.* ii. 240, 149; *Mant. Ins.* ii. 184, 308; *Ent. Syst.* iii. 2, 126, 379. *Esp. Schmett.* iv. pl. 165, f. 1—3. *Bork. Eur. Schmett.* iv. 95, 38. *Rossi, Faun. Etrusc.* 1145. *Donov. Brit. Ins.* vii. pl. 221. *Hübn. Eur. Schmett. Noct.* pl. 21, f. 98. *Haw. Lep. Brit.* 9. *Dup. Hist. Nat. Lép. Fr.* vii. 286, pl. 118. f. 1.

Anarta Myrtilli, *Hübn Verz. Schmett.* 220, 2207. *Treit. Schmett.* v. 201, 1. *Steph. Ill. Brit. Ent. Haust.* iii. 111. *Curt. Brit. Ent.* pl. 145. *Boisd. Ind. Méth.* 161, 1291. *Guen. Noct.* ii. 194, 958.

Heliothisa Myrtilli, *Meig. Syst. Besch.* iii. 224, 2, pl. 118, f. 11.

a—i. England. From Mr. Stephens' collection.
j—n. England.
o. Scotland. From Mr. Foxcroft's collection.
p, q. Europe. From M. Becker's collection.
r. ———?

16. ANARTA VIOLACEA.

Purpurea; thorax nigro fasciatus; abdomen nigrum, apice rubrum; alæ anticæ fasciis nigris, lituris anticis albidis, ciliis albis; posticæ luteæ, basi margineque lato nigris, ciliis testaceis.

Anarta violacea, *Herr.-Schæff. Schmett. Eur.* ii. pl. 55, f. 276, 277. *Guen. Noct.* ii. 195, 959.

Turkey?

Genus 13. CYREBIA.

Corpus robustum. Palpi breves, porrecti, caput vix superantes; articulus 3us minutus, conicus. Antennæ simplices, corporis dimidio paullo longiores. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ posticæ calcaribus longis. Alæ anticæ apud costam rectæ, apice angulatæ, margine exteriore perparum obliquo.

Cyrebia, *Guen. Noct.* ii. 195.
Anarta, p., *Herr.-Schæff.*

Body stout. Palpi short, porrect, hardly extending beyond the head; third joint minute, conical. Antennæ simple, a little more than half the length of the body Abdomen hardly extending beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Fore wings straight in front, angular at the tips, very slightly oblique along the exterior border.

1. Cyrebia Luperionoides.

Sordide olivacea; abdomen luteum; alæ anticæ lineis transversis undulatis fuscis, submarginali apud costam dilatata, macula discali trigona nigra, venis ferrugineis; posticæ luteæ, margine atro, ciliis luteis.

Anarta Chardinyi, *Herr.-Schæff. Schmett. Eur.* ii. pl. 92, f. 474.
Cyrebia Luperinoides, *Guen. Noct.* ii. 196, 960.

South Russia.

2. Cyrebia anachoreta.

Ferruginea; abdomen nigro-fuscum; alæ anticæ disco nigricante, costa maculis strigaque intermedia testaceis, linea submarginali undulata ciliisque pallidis; posticæ luteæ, nigro marginatæ, ciliis testaceis.

Anarta anachoreta, *Herr.-Schæff. Schmett. Eur.* ii. pl. 34, f. 167, 168.
Cyrebia anachoreta, *Guen. Noct.* ii. 196, 961.

South Russia.

Genus 14. PANEMERIA.

Corpus mediocriter validum, vix pilosum. Proboscis breviuscula. Palpi brevissimi, caput non superantes; articulus 3us minimus. Antennæ simplices, corporis dimidio perpaullo longiores. Abdomen alas posticas non superans. Pedes vix robusti; tibiæ posticæ calcaribus longis. Alæ anticæ mediocriter latæ, apud costam rectæ, apice subangulatæ, margine exteriore subobliquo.

Heliodes, *Guen. Ann. Soc. Ent. Fr.* x. 61; *Noct.* ii. 197; *Dup.*
Anarta, p., *Ochs.; Treit.; Steph.; Boisd.*
Panemeria, *Hübn. Verz. Schmett.* 262.

Body moderately stout, very slightly pilose. Proboscis rather short. Palpi very short, not extending beyond the head; third joint very minute. Antennæ simple, little more than half the length of the body. Abdomen not extending quite so far as the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Fore wings moderately broad, straight in front, slightly angular at the tips; exterior border slightly oblique.

1. Panemeria Arbuti.

Cinereo-fusca; alæ anticæ fasciis duabus obscurioribus, ciliis testaceis; posticæ nigro-cupreæ, fascia lutea, ciliis testaceis.

——— ———, *Engr. Pap. d'Eur.* 606, a, b.
Noctua Arbuti, *Fabr. Sp. Ins.* ii. 241, 150; *Mant. Ins.* ii. 184, 309; *Ent. Syst.* iii. 2, 126, 380. *Schaldt, Thunb.* 1792, 54, *Donov. Brit. Ins.* pl. 343, f. 3. *Esp. Schmett.* iv. text. *Brahm, Ins.* 192.
Phalæna-Noctua Arbuti, *Gmel. ed. Syst. Nat.* i. 5, 2570, 1157.
Noctua domestica, *Kuhn, Naturf.* iii. pl. 1, f. 8.
Noctua Heliaca, *Wien. Verz.* 94, 7. *Bork. Eur. Schmett.* iv. 68, 25. *Hübn. Eur. Schmett. Noct.* pl. 64, f. 316. *Frey. Beitr.* pl. 119. *Dup. Hist. Nat. Lép. Fr.* vii. 293, pl. 118, f. 1.
Noctua fasciola, *Esp. Schmett.* iv. pl. 163, f. 1.
Noctua Policula, *Lang.* 1134.
Panemeria Heliaca, *Hübn. Verz. Schmett.* 262, 2581.
Anarta Heliaca, *Treit. Schmett.* v. 212, 7. *Steph. Ill. Brit. Ent. Haust.* iii. 112.
Heliothisa Heliaca, *Meig. Syst. Besch.* iii. 225, 3, pl. 118, f. 12.
Anarta Arbuti, *Boisd. Ind. Méth.* 162, 1300.
Heliodes Arbuti, *Guen. Noct.* ii. 197, 962.

a—l. England. From Mr. Stephens' collection.
m—r. England.
s. Scotland. From Mr. Foxcroft's collection.
t, v. Europe. From M. Becker's collection.
u, w. Europe. From Mr. Milne's collection.

2. Panemeria Jocosa.

Fuscescens; alæ anticæ lineis variis obscurioribus, fascia latissima pallidiore, fascia marginali glaucescente nigro marginata, ciliis luteis nigro variis; posticæ luteæ, basi margineque atris, ciliis luteis.

Anarta jocosa, *Herr.-Schæff. Schmett. Eur.* ii. pl. 86, f. 444, 445.
Heliodes jocosa, *Guen. Noct.* ii. 198, 963.

Europe.

3. Panemeria tortriciformis.

Alæ anticæ bifasciatæ, fusco, albido cervinoque variæ, ex parte albido strigatæ, squamis ciliisque chalybeis micantibus ornata, plaga costali subapicali flavescente-albo, macula discali nigricante chalybeo marginata; posticæ luteæ, margine lato nigro.

Heliodes tortriciformis, *Guen. Noct.* ii. 198, 964.

Australia.

ADDENDA

TO THE

Noctuites Trifidæ, Bombyciformes and Genuinæ.

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CYMATOPHORA? MODERATA.

Fœm. *Fuscescente-murina; palpi oblique ascendentes, articulo 3o breviusculo; abdomen cinereum; alæ anticæ lineis canis indistinctis, guttis exterioribus nigricantibus, linea submarginali bene determinata, orbiculari et reniformi magnis cano ex parte marginatis, orbiculari obliqua oblonga, reniformi valde excavata; posticæ fuscescente-cinereæ.*

Female. Brownish mouse-colour. Palpi obliquely ascending third joint elongate-conical, hardly one-fourth of the length of the second. Abdomen dull cinereous. Fore wings with the transverse lines hoary, nearly straight, rather indistinct, excepting the submarginal one, between which and the exterior median line there is a double row of indistinct blackish dots; orbicular and reniform spots large, with incomplete hoary borders; orbicular oblique, oblong, smaller than the reniform, which is much excavated on the outer side. Hind wings brownish cinereous. Length of the body 6 lines; of the wings 14 lines.

a. Bogotà. From Mr. Stevens' collection.

CYMATOPHORA ALBUNCULA.

Mas. *Alæ anticæ obscure fuscæ, maculis ordinariis uncinulo albo nigro circumscripto signatis; alæ posticæ subcinereæ, externe obscuriores; lunula discali nigricante.*

Cymatophora albuncula, *Eversmann*, *Bull. Soc. Imp. Nat. Mosc.* 1861, xxiv. No. 2, 627, 15.

Allied to *C. bipuncta*.

Irkoutsk.

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DIPHTHERA PLACENS.

Fœm. *Albida; caput nigro bifasciatum; thorax nigro varius, fascia antica cervina; abdomen apicem versus cinereum; pedes nigro fasciati; alæ anticæ subargenteæ, strigis transversis, lituris costalibus, lineis angulosis maculisque nonnullis nigris, orbiculari et reniformi albo nigroque marginatis; posticæ albidæ, fuscescente marginatæ.*

Female. Whitish. Head with two black bands. Palpi black on the outer side. Thorax with two oblique black stripes, and with a black band, in front of which there is a broader fawn-coloured band. Abdomen cinereous towards the tip. Legs with black bands. Fore wings somewhat silvery, with black transverse streaks, with black costal marks, with irregular zigzag black transverse lines, and with a few black spots; first spot by the claviform mark; second between the orbicular and the reniform; third near the tip of the costa; fourth and fifth on the exterior border; orbicular and reniform spots with white and black borders, the former round, nearly half the size of the latter. Hind wings white, brownish along the borders. Length of the body 8 lines; of the wings 18 lines.

a. Bogotà. From Mr. Stevens' collection.

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ACRONYCTA DIFFUSA.

Cinerea; thorax nigro conspersus; abdomen canum; alæ anticæ fusco ex parte nebulosæ, lineis transversis nigris undulatis duplicatis, lunulis marginalibus nigris, orbiculari et reniformi nigro marginatis; posticæ pallide cinereæ, fuscescente marginatæ.

Cinereous. Thorax speckled with black. Abdomen hoary. Fore wings shaded here and there with dark brown; transverse lines black, undulating, double; the black submarginal streaks between the veins ending in marginal lunules; orbicular and reniform

spots with black borders, the former almost round, about one-fourth of the size of the latter. Hind wings pale cinereous, with brownish borders. Length of the body 6 lines; of the wings 16 lines.

a Turkey. Presented by W. K. Loftus, Esq.

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ACRONYCTA CIRCULIFERA.

Fœm. *Alba; thorax nigro bifasciatus; tarsi nigro fasciati; alæ anticæ fusco subconspersæ, fascia interiore incompleta fusca, lineis tribus nigris, 1a 2aque connexis, lunulis marginalibus valde elongatis, orbiculari et reniformi fusco submarginatis, orbiculari subrotunda pupillata, reniformi extus valde excavata; posticæ cinereæ, lunulis marginalibus fuscis, ciliis albis.*

Female. White. Thorax with two black bands in front. Tarsi with black bands. Fore wings slightly speckled with brown, with an incomplete brown band near the base, and with three irregular black lines; first and second lines joined together by a black streak behind the orbicular spot; marginal lunules black, much elongated; orbicular and reniform spots incompletely bordered with brown or black; orbicular with a black discal dot, nearly round, hardly half the size of the reniform, which is much excavated on its outer side. Hind wings cinereous; marginal lunules brown, elongated; ciliæ white. Length of the body 7 lines; of the wings 18 lines.

a. East Florida. Presented by E. Doubleday, Esq.

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ACRONYCTA MONSTRATA.

Cinerea; alæ anticæ nigricante fuscæ, lituris tribus costalibus fasciisque latis canis, orbiculari et reniformi canis, orbiculari subrotunda, strigis marginalibus nigris; posticæ cinereæ, margine lato fuscescente, ciliis albidis.

Cinereous. Fore wings blackish brown, with three hoary marks along the costa, and with broad irregular hoary bands; discal spots mostly hoary; orbicular almost round, about half the size of the reniform; marginal streaks black, ending in lunules. Hind

wings cinereous, with broad brownish borders; ciliæ whitish. Length of the body 6 lines; of the wings 16 lines.

a. ——— ?

Page 79.

MYTHIMNA ROBUSTA.

Mas. *Testacea; thorax crassus; abdomen albido-testaceum; alæ anticæ gutta nigricante apud reniformis marginem, guttis submarginalibus nigricantibus minimis; posticæ albidæ, testaceo marginatæ.*

Male. Testaceous. Thorax very stout. Abdomen whitish testaceous. Fore wings with all the marks obsolete, except a minute blackish dot on the border of the reniform spot; blackish marginal dots very minute. Hind wings whitish, with testaceous borders. Length of the body 6 lines; of the wings 14 lines.

a. Moreton Bay. From Mr. Diggles' collection.

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LEUCANIA EXTRANEA.

hh. St. Domingo. From Mr. Tweedie's collection.
ii. Monte Video.
jj. Tasmania. Presented by Capt. J. C. Ross.
kk. Punjaub. Presented by General Hearsay.

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LEUCANIA EXTERIOR.

St. Domingo. From Mr. Tweedie's collection.

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LEUCANIA EXEMPTA.

Mas. *Pallide testacea; alæ anticæ apud costam nigro subconspersæ, vitta antica lata alba nigro uniguttata, macula exteriore cervina, guttis exterioribus et marginalibus nigris; posticæ albidæ, margine fuscescente, guttis marginalibus nigris.*

Male. Pale testaceous. Fore wings slightly speckled with black in front, with a white stripe, which extends along the costa

for more than half the length and for nearly half the breadth, contains a black dot, and joins a fawn-coloured spot at its tip; exterior and marginal dots black. Hind wings whitish, with brownish borders and black marginal dots. Length of the body 6 lines; of the wings 14 lines.

a. Ceylon. Presented by R. Templeton, Esq.

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LEUCANIA? CONVECTA.

Mas. *Testacea; abdomen pallide cinereum; alæ anticæ macula discali, guttis exterioribus et marginalibus nigris, macula antica cervina, orbiculari et reniformi obsoletis; posticæ cinereæ margine lato fuscescente, ciliis albidis.*

Male. Testaceous. Abdomen pale cinereous. Fore wings very slightly speckled with brown, with a double exterior row and with a marginal row of black dots; discal areolet having at its tip a black spot, in front of which there is an indistinct pale fawn-coloured spot; orbicular and reniform spots obsolete. Hind wings cinereous, with broad brown borders; ciliæ whitish. Length of the body 8 lines; of the wings 17 lines.

a. Moreton Bay. From Mr. Diggles' collection.

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Genus NONAGRIA.

Group 4.

Mas. Corpus gracile. Proboscis brevis. Palpi oblique ascendentes; articulus 3us cylindricus, 2i quadrante non longior. Antennæ ciliatæ, corporis dimidio vix longiores. Abdomen alas posticas superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ anticæ sat angustæ, apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo.

Male. Body slender. Proboscis short. Palpi obliquely ascending; third joint cylindrical, about one-fourth of the length of the second. Antennæ ciliated, hardly more than half the length of the body. Abdomen extending somewhat beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Fore wings rather narrow, straight in front, rounded at the tips, moderately oblique along the exterior border.

This group has some resemblance to the *Pyralites*.

NONAGRIA? DISCERPTA.

Mas. *Piceo-fusca; palpi, antennæ, abdomen et pedes albido-testacea; alæ anticæ striga nigricante guttisque duabus nigris terminalibus discalibus, costa sat pallida, lunulis marginalibus nigricantibus; posticæ albæ.*

Male. Piceous-brown. Palpi, antennæ, abdomen and legs testaceous whitish. Fore wings with a blackish discal streak, which has a black dot at each end; costa somewhat pale; a row of blackish marginal lunules. Hind wings white. Length of the body 4 lines; of the wings 10 lines.

a. Brazil. From Mr. Argent's collection.

Group ?

NONAGRIA INDUBITANS.

Mas. *Pallide cervina; frons fasciculata; palpi oblique ascendentes; articulus 2us 3o longi-conico quadruplo longior; abdomen pallidum; alæ anticæ fascia obscuriore lata indistincta antice abbreviata ramosque tres emittente, marginibus nigro-cinereis; posticæ albæ.*

Male. Pale fawn-colour. Head with a frontal tuft. Palpi obliquely ascending; third joint elongate-conical, not more than one-fourth of the length of the second. Abdomen paler than the thorax. Fore wings with a broad indistinct darker band, which is shortened, and emits three branches in front; interior border and exterior border blackish gray. Hind wings white. Length of the body 3½ lines; of the wings 8 lines.

a. Parà. From Mr. Johnson's collection.

NONAGRIA? IRREGULARIS.

Fœm. *Cervina; palpi ascendentes; articulus 3us conicus, 2i quadrante non longior; abdomen pallidum; alæ anticæ lineis duabus indistinctis guttularibus nigris, reniformi parva albida nigro marginata; posticæ albidæ, margine pallide cervino.*

Female. Fawn-colour. Palpi ascending; third joint conical, not more than one-fourth of the length of the second. Abdomen pale. Fore wings with two indistinct lines of black dots, one interior, the other exterior; reniform spot small, whitish, with a black

border. Hind wings whitish, pale fawn-colour along the border. Length of the body 5 lines; of the wings 12 lines.

a. Hindostan. From Archdeacon Clerk's collection.

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NONAGRIA? INTERLATA.

Fœm. *Pallide testacea, graciles; palpi ascendentes; thorax antice nigro fasciatus; alæ anticæ nigro ex parte conspersæ, striga brevi interrupta discali, venis guttisque marginalibus trigonis nigris, orbiculari et reniformi obsoletis; posticæ albido-testaceæ.*

Female. Pale testaceous, slender. Palpi ascending; third joint elongate-conical, more than one-fourth of the length of the second. Thorax with a black band in front. Fore wings slightly speckled with black between the veins, which are mostly black; two long discal streaks not flecked with black, the fore one containing a short interrupted black streak; marginal dots black, triangular; orbicular and reniform spots obsolete; exterior border hardly oblique. Hind wings whitish testaceous. Length of the body 5 lines; of the wings 12 lines.

a. Port Natal. From Dr. Krauss' collection.

3. NONAGRIA? INDIGENS.

Fœm. *Pallide cervina; abdomen pallide cinereum; palporum articulus 2us 3o cylindrico quadruplo longior; alæ anticæ mediocriter latæ, striga discali nigricante, orbiculari et reniformi parvis albo marginatis, linea exteriore e guttis nigro-albis, guttis marginalibus nigris; posticæ albæ, linea marginali nigricante.*

Female. Pale fawn-colour. Abdomen pale cinereous. Third joint of the palpi cylindrical, not more than one-fourth of the length of the second. Fore wings moderately broad, with a blackish discal streak, which includes the orbicular and reniform spots,—these are small and bordered with white; an exterior transverse line of black and white dots, and a marginal row of black dots. Hind wings white, with a blackish marginal line. Length of the body 6 lines; of the wings 14 lines.

a. ——— ?

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Genus BIULA.

Fœm. Corpus vix robustum. Proboscis brevis. Palpi graciles, oblique ascendentes; articulus 3us cylindricus. Antennæ corporis dimidio paullo longiores. Abdomen alas posticas paullo superans. Tibiæ posticæ calcaribus longis? Alæ anticæ longiusculæ, mediocriter latæ, apud costam subrectæ, apice acutæ, margine exteriore perparum obliquo.

Female. Body hardly stout. Proboscis short. Palpi slender, obliquely ascending; third joint cylindrical. Antennæ a little more than half the length of the body. Abdomen extending a little beyond the hind wings. Hind tibiæ with long spurs? Fore wings rather long, moderately broad, nearly straight in front, acute at the tips, very slightly oblique along the exterior border.

1. Biula lignilutea.

Fœm. *Testacea; alæ anticæ rufescente-cervinæ, basi costaque testaceis fusco subconspersis, guttis paucis submarginalibus fuscis; posticæ testaceæ, nitentes.*

Female. Testaceous. Fore wings reddish fawn-colour, testaceous and slightly speckled with brown at the base and along most of the costa; a few minute brown submarginal dots. Hind wings testaceous, shining. Length of the body 7 lines; of the wings 16 lines.

Java. In the East India Company's collection.

Genus CAPOTENA.

Fœm. Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, caput paullo superantes; articulus 3us longi-conicus, 2i triente brevior. Thorax crassus. Abdomen alas posticas trientes superans. Pedes mediocriter validi; tibiæ posticæ calcaribus longis. Alæ anticæ longiusculæ, sat angustæ, apud costam subconvexæ, apice acutæ, margine exteriore sat obliquo.

Female. Body stout. Proboscis moderately long. Palpi porrect, extending a little beyond the head; third joint elongate-conical, more than one-fourth of the length of the second. Thorax very robust. Abdomen extending for one-third of its length beyond

the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Fore wings rather long and narrow, slightly convex in front, acute at the tips, rather oblique along the exterior border.

1. CAPOTENA APRIFORMIS.

Fem. Ferrugineæ; abdomen cinereum; alæ anticæ pallide ferrugineæ, nigro conspersæ, guttis nonnullis vix conspicuis exterioribus nigricantibus; posticæ pallide cinereæ, costa ciliisque albidis.

Female. Ferruginous. Abdomen cinereous. Fore wings pale ferruginous, very minutely flecked with black, without marks, except an indistinct one at the tip of the discal areolet and some hardly visible exterior blackish dots. Hind wings pale cinereous; costa and ciliæ whitish. Length of the body 7 lines; of the wings 17 lines.

Java. In the East India Company's collection.

Fam. LEUCANIDÆ?

Genus MALLOMUS.

Corpus longiusculum, dense lanatum. Caput prominens. Proboscis elongata. Palpi recti, ultra clypeum assurgentes; articulus 2us cylindricus, hirtus; 3us vix brevior, ovatus, fere nudus. Antennæ setaceæ, medio paululum incrassatæ. Alæ oblongæ, integræ, late fimbriatæ.

Mallomus, *Blanch.* *Gay, Hist. Chile*, vii. 70.

1. MALLOMUS CILIATUS.

Totus pallide cinereus; thorax valde lanatus; alæ nitidæ, concolores, atomis adspersæ, paullo obscuriores, apices versus præsertim.

Mallomus ciliatus, *Blanch.* *Gay, Hist. Chile*, vii. 71, 1. *Atlas, Zool. Ent. Lep.* pl. 6, f. 5.

Coquimbo.

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GORTYNA FLAVAGO.

r. Orilla, West Canada. From Mr. Bush's collection.

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GORTYNA DITISSIMA.

Fœm. *Fusca; palpi validi, oblique ascendentes, articulo 3o minimo; thoracis latera inter alas purpurascente rufa; abdomen cinereum; alæ anticæ rufo-ochraceæ, flavo conspersæ, apices versus nigricante cinereæ, lineis nigricantibus subundulatis, orbiculari parva transversa subovata, reniformi arctata niveo marginata; posticæ cinereæ, margine lato fuscescente.*

Female. Brown. Palpi stout, obliquely ascending; third joint very minute, not more than one-sixth of the length of the second. Thorax purplish red on each side between the wings. Abdomen cinereous. Fore wings bright reddish orange, partly and irregularly flecked with yellow; apical part mostly blackish cinereous; transverse lines blackish, slight, undulating; orbicular spot transverse, nearly oval, not one-fourth of the size of the reniform, which is excavated on both sides in the middle, and is mostly bordered with snow-white. Hind wings cinereous, with broad brownish borders. Length of the body 8 lines; of the wings 18 lines.

a. Mexico. From M. Sallé's collection.

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HYDRÆCIA NICTITANS.

ii. New York. Presented by E. Doubleday, Esq.
jj, kk. Europe. From M. Becker's collection.

Page 160.

HYDRÆCIA CUPREA.

Var.? *Cervina; alæ anticæ disco ex parte lineaque submarginali ferrugineis, maculis discalibus fasciisque exterioribus albido-cervinis.*

Fawn-colour. Fore wings with part of the disk and the submarginal line ferruginous; discal spots and exterior bands whitish fawn-colour.

e. Europe. From M. Becker's collection.
f. Lapland. Presented by J. R. Crowe, Esq.

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HYDRÆCIA STRAMENTOSA.

b. New York. Presented by E. Doubleday, Esq.
c. Illinois. Presented by E. Doubleday, Esq.

HYDRÆCIA SALICARUM.

Mas. *Ferruginea; palpi ascendentes, articulo 2o valido, 3o gracili, thorax antice cristatus; abdomen subcinereum; alæ anticæ nitentes fasciis tribus obscurioribus, 3a marginali intus pallido marginata, costa apud apicem pallido guttata, maculis nigro marginatis, orbiculari transversa subelliptica, reniformi extus subexcavata.*

Noctua Salicarum, *Barnston, MSS.*

Male. Ferruginous. Palpi ascending; second joint stout, third slender, not one-fourth of the length of the second. Thorax crested in front. Abdomen somewhat cinereous. Fore wings shining, with two darker bands, the one exterior, the other marginal and with a pale border on the inner side; the other transverse lines indistinct; costa with some pale dots towards the tip; discal spots bordered with black; orbicular transverse, almost elliptical, much smaller than the reniform, which is slightly excavated on the exterior side. Length of the body 5—6 lines; of the wings 13—15 lines.

a—d. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

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NEPHELODES MINIANS.

h. New York. Presented by E. Doubleday, Esq.

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AXYLIA INTENDENS.

Testacea; alæ anticæ ex parte ferrugineæ, fusco conspersæ, costa margineque exteriore ex maxima parte fuscis, lineis transversis duplicatis indistinctis fuscis, orbiculari et reniformi nigro albidoque marginatis, orbiculari subrotunda; posticæ albidæ.

Testaceous. Fore wings partly ferruginous, with brown specks, nearly wholly brown towards the costa and along the exterior

border, except at the tips; transverse lines brown, double, indistinct; orbicular and reniform spots with black and whitish borders, the latter colour most prevalent on the orbicular, which is nearly round and more than half the size of the reniform. Hind wings whitish. Length of the body 5 lines; of the wings 12 lines.

a. Cape. From M. Dregé's collection.

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XYLOPHASIA HEPATICA.

s. Gibraltar. From Mr. Milne's collection.

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XYLOPHASIA ARCUATA.

Mas. *Ferruginea; palpi oblique ascendentes, articulo 3o lanceolato longiusculo; abdomen cinereum; alæ anticæ nigro conspersæ, costa subconvexa, fasciis testaceis undulatis aut angulosis nigro marginatis, orbiculari et reniformi nigro marginatis, orbiculari oblonga subelliptica, reniformis disco pallide luteo; posticæ cinereæ, margine latissimo, linea stigmateque fuscis.*

Male. Ferruginous. Palpi obliquely ascending; third joint lanceolate, full one-third of the length of the second. Antennæ simple. Abdomen cinereous. Fore wings speckled with black; costa slightly convex; bands testaceous, undulating or zigzag, bordered with black; marginal lunules black, almost linear; orbicular and reniform spots with black borders; orbicular oblong, almost elliptical, much smaller than the reniform, which is slightly excavated on the outer side, and has a pale luteous disk. Hind wings cinereous, with very broad brown borders; discal line and stigma also brown; ciliæ, as in the fore wings, interlined with testaceous. Length of the body 7 lines; of the wings 16 lines.

a. East Florida. Presented by E. Doubleday, Esq.

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LAPHYGMA VITRINA.

Mas et fœm. *Albida; abdomen cinereum, segmentis albido marginatis; alæ anticæ cinereo conspersæ, apud marginem exteriorem fuscescentes, punctis exterioribus strigisque marginalibus nigris; posticæ albæ.* Mas.—*Alæ posticæ subhyalinæ, margine fuscescente.* Fœm.—*Alæ anticæ linea discali angulata nigra; posticæ margine lato fuscescentes.*

Male and female. Whitish. Abdomen above cinereous, with a white band on the hind border of each segment. Fore wings with minute cinereous speckles tinged with brown towards the exterior border, with an exterior line of black points, and with black marginal streaks. Hind wings white. *Male.*—Hind wings nearly hyaline, their tips and the tips of some of the veins on the exterior border tinged with brown. *Female.*—Hind wings very slightly hyaline, with broad brownish borders; veins dark brown towards the tips. Fore wings with a black angular discal line. Length of the body 4½—5 lines; of the wings 11—12 lines.

a—d. St. Domingo. From Mr. Tweedie's collection.

Laphygma filifera.

Mas. *Cana; palpi fulvi; thorax nigro conspersus, fasciis duabus anticis cervinis; alæ anticæ lineis duabus interioribus unaque exteriore abbreviata angulosis nigris, linea submarginali e guttis nigris indistinctis, guttis marginalibus nigris elongatis, orbiculari obsoleta, reniformi subrotunda fusco pupillata nigro marginata; posticæ albæ, iridescentes, semihyalinæ.*

Male. Hoary. Proboscis and palpi fawn-colour. Thorax speckled with black, with two slight fawn-coloured bands in front. Fore wings with two interior and one exterior angulose black lines, the latter obsolete towards the interior border; submarginal line represented by indistinct black dots; marginal dots black, elongated; orbicular spot obsolete; reniform nearly round, with a brown centre and a black border. Hind wings white, iridescent, semihyaline. Length of the body 6½ lines; of the wings 13 lines.

a. St. Domingo. From Mr. Tweedie's collection.

Laphygma orbicularis.

Mas. *Cana, vix subtestacea; thorax fascia antica interrupta nigra; tarsi nigro fasciati; alæ anticæ striga basali, macula rotunda discali guttisque exterioribus et marginalibus nigris, strigis nonnullis lanceolatis cervinis; posticæ albæ, guttis marginalibus nigricantibus.* Var. β.—*Alæ anticæ strigis diffusis fuscescentibus.*

Male. Hoary, with a very slight testaceous tinge. Thorax with a slender interrupted black band in front. Tarsi with black

bands. Fore wings with a slender black streak at the base, with a round black discal spot, and with two rows of black dots, the one exterior, the other marginal; some fawn-coloured lanceolate streaks between the rows. Hind wings white, with a few minute blackish marginal dots. *Var.* β.—Fore wings with several diffuse brownish streaks. Length of the body 6 lines; of the wings 14 lines.

a, b. St. Domingo. From Mr. Tweedie's collection.

LAPHYGMA FERROCANA.

Fœm. *Cana; alæ anticæ sat angustæ, apud costam subconvexæ, lituris costalibus, lineis transversis angulosis guttisque marginalibus nigris, orbiculari obsoleta, reniformi nigro marginata, linea submarginali fusca indistincta angulosa cano marginata; posticæ æneo-fuscæ, ciliis cinereis.*

Female. Hoary. Fore wings rather narrow, slightly convex in front, with black marks in front, with black angulose transverse lines, and with black marginal dots; orbicular spot obsolete; reniform with an angulose black border; submarginal line indistinct, brown, angular, with a hoary border on each side. Hind wings æneous-brown; ciliæ cinereous. Length of the body 4 lines; of the wings 10 lines.

a. Jamaica. From Mr. Gosse's collection.

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LAPHYGMA TERENS.

Fœm. *Cinerea; abdomen albidum; alæ anticæ margine exterior maculaque reniformi ex parte nigricantibus, hac indistincta, orbiculari obsoleta, venis apice nigris; posticæ albæ, semihyalinæ iridescentes, apice fuscæ.*

Female. Pale cinereous. Palpi porrect; third joint about one-third of the length of the second. Abdomen whitish. Fore wings partly blackish along the exterior border and on the reniform spot, which is indistinct; orbicular spot obsolete; veins black towards their tips. Hind wings white, semihyaline, iridescent, brown at the tips. Length of the body 4 lines; of the wings 10 lines.

a. Venezuela. From Mr. Dyson's collection.

Laphygma triplex.

Mas. *Albido-testacea, iridescens; abdomen albidum; alæ anticæ latiusculæ, margine exteriore vix obliquo, lituris valde indistinctis, orbiculari obsoleta, reniformi ex parte guttisque exterioribus fuscis, guttis marginalibus nigris; posticæ albæ, semihyalinæ.*

Male. Whitish testaceous, iridescent. Abdomen whitish. Fore wings rather broad, hardly oblique along the exterior border; all the marks very indistinct; orbicular spot obsolete; reniform partly brown; an exterior row of brown dots; marginal dots black. Hind wings white, iridescent, semihyaline. Length of the body 4 lines; of the wings 10 lines.

a. Honduras. From Mr. Dyson's collection.

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Laphygma procedens.

Mas. *Testacea; antennæ subciliatæ; alæ anticæ lineis transversis duplicatis angulosis nigricantibus, margine exteriore subfuscescente, lunulis marginalibus maculaque reniformi nigris, orbiculari subobsoleta; posticæ albæ, semihyalinæ.*

Male. Testaceous. Antennæ minutely ciliated. Fore wings with the transverse lines blackish, slender, zigzag, double; a brownish tinge along the exterior border; marginal lunules black; orbicular spot almost obsolete; reniform mostly black. Hind wings white, semihyaline. Length of the body 4½ lines; of the wings 11 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

Laphygma? punctifinis.

Mas. *Pallide cervina; palporum articulus 3us cylindricus, 2i triente non brevior; antennæ vix serratæ; alæ anticæ nigro subconspersæ, striga discali nigricante guttisque duabus terminalibus nigris, reniformi parva albida, linea exteriore indistincta e guttis paucis nigricantibus, lunulis marginalibus nigricantibus; posticæ albæ, linea marginali pallide fusca.*

Male. Pale fawn-colour. Third joint of the palpi cylindrical, full one-third of the length of the second. Antennæ hardly serrated. Fore wings with minute blackish speckles, and with a blackish discal streak, which has at each end a black dot, and includes the

reniform spot, which is small and whitish; an indistinct exterior line composed of a few blackish dots, and with blackish marginal lunules. Hind wings white, with a pale brown marginal line. Length of the body 5 lines; of the wings 12 lines.

a. ———?

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PRODENIA COMMELINÆ.

k, l. St. Domingo. From Mr. Tweedie's collection.

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PRODENIA SIGNIFERA.

e. St. Domingo. From Mr. Tweedie's collection.

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PRODENIA VARIOLOSA.

Mas. *Pallide testacea; palpi fusco fasciati; tarsi nigro guttati; alæ anticæ cervinæ, plaga magna subquadrata strigaque obliqua lata testaceis, fascia interiore cinerea, fascia exteriore latiore albida maculam fuscam includente intus cinereo nebulosa, linea mediana fusca duplicata undulata, liturris costalibus et basalibus nigris albidisque, reniformi nigro ex parte marginata, linea submarginali lunulisque marginalibus nigris; posticæ albæ, margine angusto fusco.*

Male. Pale testaceous. Palpi with a brown band. Tarsi with a black dot on each joint. Fore wings mostly fawn-coloured; a large subquadrate pale testaceous patch extending from the middle of the interior border to the reniform spot, communicating with a paler testaceous broad oblique streak, which cuts off part of the orbicular spot; an interior gray band, and a broader exterior whitish band, which includes a brown spot, and is shaded with gray on the inner side, where it joins the double undulating brown median line; some black and whitish marks along the costa and near the base; reniform spot partly bordered with black; submarginal line black, very slight; marginal lunules black. Hind wings white, with a very slender brown border; veins brown towards the tips. Length of the body 7—8 lines; of the wings 14—16 lines.

a, b. St. Domingo. From Mr. Tweedie's collection.
c. St. Domingo. From Mr. Stevens' collection.

Prodenia Marmorea.

Cervina; thorax nigro-bivittatus; alæ anticæ nigro variæ; lituris basalibus unaque discali, striga posteriore fasciaque exteriore albidis; posticæ albæ, venis apud margines margineque antico cinereis.

Phalæna-Noctua Marmorea, *Anon. Ins. Surinam*, ii. 109, pl. 51.

Surinam.

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Prodenia glaucistriga.

e. Moreton Bay. From Mr. Diggles' collection.

Prodenia declinata.

Mas. *Pallide testacea; thorax cervino fasciatus; abdomen albidum; alæ anticæ angustæ, cervino subnebulosæ, lineis pallidis indistinctis nigro ex parte marginatis, fascia antica lata obliqua albida, fascia apicali lata obliqua albido-purpurascente, strigis submarginalibus fuscis; posticæ albæ, semihyalinæ, margine perangusto fusco.*

Male. Pale testaceous. Thorax with a dull pale fawn-coloured band. Abdomen whitish. Fore wings narrow, slightly clouded with dull pale fawn-colour; transverse lines pale, indistinct, partly bordered with black; an oblique broad whitish band in front hiding the orbicular spot and contiguous to the reniform one, which is large, distinct, and much excavated on the exterior side; a lilac-white broad oblique apical band, which extends over some of the submarginal brown streaks. Hind wings white, iridescent, semi-hyaline, with very narrow brown borders. Length of the body 5 lines; of the wings 12 lines.

a. Hindostan. From Archdeacon Clerk's collection.

Prodenia permunda.

Fœm. *Obscure cinerea; thorax nigro conspersus; abdomen canum; alæ anticæ lineis transversis angulosis, strigis exterioribus guttisque marginalibus nigris, linea submarginali angulosa albida, orbiculari subcinerea, reniformi atra, albido ex parte marginata; posticæ albæ, margine angusto venisque fuscis.*

Female. Dark cinereous. Thorax speckled with black. Abdomen hoary. Fore wings with the transverse lines black, angulose; some exterior black streaks; submarginal line angulose, whitish; marginal dots black; orbicular spot slightly pale greenish, with a white mark between it and the reniform, which is deep black and partly bordered with white. Hind wings white, with narrow brown borders and brown veins. Length of the body 7½ lines; of the wings 15 lines.

a. Siam. Presented by J. C. Bowring, Esq.

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PRODENIA BIPARS.

Mas. *Nigricante-cinerea; abdomen canum; alæ anticæ lituris basalibus, lineis medianis angulosis, strigis exterioribus lunulisque marginalibus atris, orbiculari obliqua fuscescente atro marginata, reniformi cana, disco nigro, margine atro; posticæ albæ, margine perangusto fusco.*

Male. Blackish cinereous. Abdomen hoary. Fore wings with some basal marks, the zigzag median lines, a few exterior streaks, and the marginal lunules deep black; orbicular spot oblique, brownish, with a deep black border; reniform hoary, with a black disk and a deep black border. Hind wings white, with a very narrow brown border; veins brown towards the tips. Length of the body 7½ lines; of the wings 15 lines.

a. Moreton Bay. From Mr. Diggles' collection.

Genus ISCADIA.

Mas. Corpus vix robustum. Proboscis brevis. Palpi breves. Antennæ simplices. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ posticæ calcaribus longis? Alæ anticæ angustæ, apud costam subconvexæ, apice rotundatæ, margine exteriore antice non obliquo postice perobliquo

Male. Body hardly stout. Proboscis and palpi short. Antennæ simple, hardly half the length of the body? Abdomen hardly extending beyond the hind wings. Legs moderately stout; hind tibiæ with long spurs? Fore wings narrow, slightly convex in front, rounded at the tips, not oblique along the fore half of the exterior border, but very oblique along the hind half. Hind wings rather broad.

1. Iscadia aperta.

Mas. *Cana; antennæ luteæ; alæ anticæ ex parte subglaucescentes, lineis quatuor angustis nigris, 1a basali, 2a interiore, 3a furcata, furca exteriore lineaque 4a connexis, linea submarginali albida angulosa, linea marginali nigra, orbiculari ex parte cervina, reniformi nigro pupillata; posticæ albæ, semihyalinæ, fusco ex parte marginatæ.*

Male. Hoary. Antennæ luteous. Fore wings slightly and partly glaucous, with four slender black transverse lines; first line basal; second interior; third divided in front of the reniform spot, the inner branch extending to the interior border, the outer branch extending to a little beyond half the breadth of the wings, where it turns outward and joins the fourth, which is very irregular, and approaches very close to the second on the costa; submarginal line whitish, angulose marginal dots forming an uninterrupted black line; orbicular spot partly fawn-colour, very much smaller than the reniform, which has a black centre. Hind wings white, semihyaline, partly and slightly bordered with brown. Length of the body 6 lines; of the wings 16 lines.

a. St. Domingo. From Mr. Tweedie's collection.

Genus OLYCA.

Mas. Corpus vix robustum. Proboscis brevis. Palpi porrecti, caput superantes; articulus 2us longus, validus; 3us conicus, minimus. Antennæ subciliatæ, corporis dimidio multo longiores. Abdomen alas posticas triente superans. Pedes longi, sat validi, non pilosi; tibiæ posticæ calcaribus longis. Alæ anticæ angustæ, apud costam rectæ, apice rotundatæ, margine exteriore vix obliquo.

Male. Body hardly stout. Proboscis short. Palpi porrect, extending somewhat beyond the head; second joint long, stout; third conical, very minute. Antennæ very minutely ciliated, much more than half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. Legs long, rather stout, not pilose; hind tibiæ with long spurs. Fore wings narrow, straight in front, rounded at the tips, very slightly oblique along the exterior border. Hind wings rather narrow. Wings with broad ciliæ.

1. Olyca Phryganoides.

Mas. *Cana; palpi ex parte nigri; thorax et abdomen basi vittis duabus lateralibus nigris; alæ anticæ nigro conspersæ et substrigatæ, roseo tinctæ, guttis marginalibus nigris; posticæ albæ, fusco vix marginatæ.*

Male. Hoary. Palpi partly black. Thorax with two broad black lateral stripes, which are continued over the basal part of the abdomen. Fore wings speckled and irregularly streaked with black, tinged with pale rose-colour; marginal dots black. Hind wings white, hardly bordered with brown. Length of the body 6½—7 lines; of the wings 16—17 lines.

a—c. St. Domingo. From Mr. Tweedie's collection.

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Crymodes frigida ??

a, b. Lapland. Presented by J. R. Crowe, Esq.

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Mamestra adjuncta.

Var. *Olivaceo-cinerea; abdomen cinereum; alæ anticæ lineis undulatis nigris albo ex parte marginatis, claviformi, orbiculari et reniformi magnis albis nigro marginatis, ciliis albido strigatis; posticæ albæ, linea apud angulum interiorem brevi fusca.*

Olive-cinereous. Abdomen cinereous. Fore wings with the black lines undulating, partly bordered with white; claviform, orbicular and reniform spots large, white, with black borders; ciliæ with whitish streaks. Hind wings white, with a short brown line near the interior angle. Length of the body 6 lines; of the wings 16 lines.

c. ——— ?

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Mamestra albiflexura.

Mas. *Cervina; abdomen cinereum; alæ anticæ breviusculæ latiusculæ, lineis testaceis subundulatis nigro marginatis, strigis nigris e linea submarginali pallida interruptis, guttis marginalibus nigris, orbiculari et reniformi indeterminatis, hac extus albo notata; posticæ cinereæ, margine lato æneo, lunulis marginalibus fuscis.*

Male. Fawn-colour. Abdomen cinereous. Fore wings rather short and broad, with the transverse lines testaceous, slightly undulating, bordered with black; a row of black streaks interrupted by the submarginal line, which is paler, more straight, and more distinct than the others; marginal dots black; orbicular and reniform spots indefinite, the latter with an angular white mark on its exterior side. Hind wings cinereous, with broad æneous borders and brown marginal lunules. Length of the body 7 lines; of the wings 15 lines.

a. Hindostan. From Mr. Argent's collection.

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MAMESTRA INSIGNATA.

Fœm. *Nigra; palpi ascendentes, articulo 3o longi-conico; abdomen cinereum, cristatum; alæ anticæ lineis atris undulatis indistinctis, orbiculari magna subovata subobliqua, reniformi testaceo maculata; posticæ cinereæ, margine latissimo fusco.*

Female. Black. Palpi ascending; third joint elongate-conical, not more than one-fourth of the length of the second. Abdomen cinereous, crested. Fore wings with the transverse lines deep black, undulating, indistinct, as are also the borders of the discal spots; orbicular spot large, oblong, slightly oblique, nearly oval; reniform with a testaceous spot in its disk. Hind wings cinereous, with very broad brown borders. Length of the body 5½ lines; of the wings 14 lines.

a. Moreton Bay. From Mr. Diggles' collection.

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DASYGASTER HOLLANDIÆ.

a. Moreton Bay. From Mr. Diggles' collection.

DASYGASTER LEUCANIOIDES.

b. Tasmania. Presented by Morton Allport, Esq.
c. Tasmania. From Mr. A. J. Smith's collection.
d. Australia. Presented by Major-Gen. Hardwicke.
e. Tasmania. Presented by J. G. Children, Esq.

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APAMEA FINITIMA.

Var. *Cana; caput supra ferrugineum; palpi vix ascendentes, caput paullo superantes; articulus 3us minimus; thorax linea transversa undulata nigra fasciaque ferruginea; alæ antica apud costam ferrugineæ, lineis nigris undulatis valde incompletis, submarginali albida intus fusco marginata, fascia marginali subferruginea, lunulis marginalibus fuscis, maculis ex parte nigro marginatis, orbiculari albida obliqua, reniformi ferruginea testaceo notata extus valde excavata; posticæ albido-cinereæ, macula discali fusca, margine lato cupreo-fusco.*

Hoary. Head ferruginous above. Palpi hardly ascending, extending a little beyond the head; third joint very small, not one-fourth of the length of the second. Thorax with a transverse undulating black line, behind which there is a ferruginous band; some black flecks behind the latter. Fore wings irregularly ferruginous in front; lines black, undulating, very incomplete; submarginal line whitish, bordered with brown on the inner side, and with a slightly ferruginous space between it and the exterior border, which has brown lunules; orbicular and reniform spots partly bordered with black; orbicular whitish, oblique; reniform ferruginous, with a testaceous mark, much excavated on its outer side; claviform mostly black. Hind wings whitish cinereous, with a brown discal spot, and a broad cupreous-brown border; ciliæ whitish. Length of the body 6 lines; of the wings 12—14 lines.

a—*c*. Nova Scotia. From Lieut. Redman's collection.
d. Orilla, West Canada. From Mr. Bush's collection.
e. New York. Presented by E. Doubleday, Esq.

APAMEA IASPIS.

b, *c*. New York. Presented by E. Doubleday, Esq.

APAMEA DEMISSA.

Mas. *Cana; abdomen cinerascens; alæ anticæ basi costaque nigro conspersis, lineis nigris undulatis incompletis, submarginali angulosa, maculis nigro ex parte marginatis, orbiculari alba obliqua maxima, lunulis marginalibus nigris; posticæ cinereæ, macula lineaque obscurioribus.*

Male. Hoary. Abdomen somewhat cinereous. Fore wings irregularly speckled with black towards the base and along the costa; transverse lines black, undulating, very slight and incomplete; submarginal line zigzag; a brownish space between it and the black marginal lunules, which are much elongated; spots with incomplete black borders; orbicular spot white, oblique, very large, nearly contiguous to the reniform, which is still larger and but slightly excavated on its exterior side. Hind wings cinereous; disk with a darker spot and a darker line, which are hardly visible above. Length of the body 6 lines; of the wings 16 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

Apamea ? insignata.

Fœm. *Fusca; abdomen cinereum; alæ anticæ æneo-fuscæ, lineis nigris undulatis indistinctis, orbiculari parva, reniformi albo marginata; posticæ subæneæ, basi ciliisque canis.*

Female. Brown. Abdomen cinereous. Fore wings æneous-brown, with the transverse lines black, undulating, indistinct; orbicular spot small, very remote from the reniform; the latter has a white border, which is broadest and most distinct on the hinder part. Hind wings somewhat æneous, hoary towards the base, and with hoary ciliæ. Length of the body 5 lines; of the wings 12 lines.

a. United States. Presented by E. Doubleday, Esq.

Apamea remissa.

Fœm. *Cinereo-cervina; caput et thorax nigro fasciata; palporum articulus 3us lanceolatus; alæ anticæ nigro conspersæ, lineis nigris duplicatis indistinctis, extus nigro-fuscæ, linea submarginali angulosa cervina, orbiculari et reniformi albidis, reniformi subrotunda; posticæ cinereæ, margine fuscescente, linea marginali nigra, ciliis albido-testaceis.*

Female. Cinereous fawn-colour. Head and thorax with black bands. Third joint of the palpi lanceolate, about one-third of the length of the second. Abdomen cinereous. Fore wings especially speckled with black towards the costa; transverse lines black, double, undulating, indistinct; space beyond the reniform spot mostly blackish brown, traversed by the zigzag fawn-coloured submarginal line; orbicular and reniform spots mostly whitish, the former smaller than the latter, which is nearly round. Hind wings

cinereous, brownish towards the border, where there is a black line; ciliæ whitish testaceous. Length of the body 6 lines; of the wings 14 lines.

a. New York. Presented by E. Doubleday, Esq.

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APAMEA INQUIETA.

Mas. *Cinereo-fusca; abdomen cinereum; alæ anticæ lineis nigricantibus undulatis indistinctis pallido marginatis, linea submarginali pallida angulosa, orbiculari et reniformi subobsoletis; posticæ subæneo-cinereæ.*

Male. Cinereous-brown. Abdomen cinereous. Fore wings with the transverse lines blackish, undulating, very slight and indistinct, with pale borders; submarginal line pale, zigzag; orbicular and reniform spots almost obsolete; under side with a black discal spot. Hind wings cinereous, with an æneous tinge. Length of the body 5½ lines; of the wings 14 lines.

a. ——— ? From Mr. Milne's collection.

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MIANA VINCTA.

Cervina; thorax fasciis nigricantibus; alæ anticæ lineis nigris undulatis incompletis, linea exteriore distincta subrecta, macula guttisque costalibus albis, macula apicali testacea, guttis marginalibus minimis testaceis nigrisque, orbiculari oblonga elliptica, reniformi angusta, striga discali nigra interrupta; margine exteriore nigro-cinereo; posticæ albæ, margine fuscescente.

Fawn-colour. Thorax with blackish bands. Fore wings with the transverse lines black, undulating, very incomplete; a more distinct and almost straight line touching the exterior side of the reniform spot, and extending to a white costal spot, between which aud the testaceous apical spot there are two or three white dots; marginal dots testaceous and black, very minute; orbicular spot oblong, elliptical; reniform narrow, interrupting a black discal streak; a blackish gray tinge along the exterior border. Hind wings white, with a brownish border. Length of the body 4 lines; of the wings 12 lines.

a. East Florida. Presented by E. Doubleday, Esq.

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CELÆNA HERBIMACULA.

n. Orilla, West Canada. From Mr. Bush's collection.

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CELÆNA ? IRRESOLUTA.

Pallide testacea; thorax fusco fasciatus; alæ anticæ cinereo-fuscæ, maculis distinctis nigro marginatis, orbiculari fusiformi oblonga, reniformi obliqua lineari, striga discali interrupta nigricante, linea transversa exteriore pallida subundulata nigro marginata, maculo apicali testacea; posticæ albæ, margine subfuscescente.

Pale testaceous. Thorax with a brown band in front. Fore wings mostly cinereous-brown; claviform, orbicular and reniform spots distinct, with black borders; orbicular fusiform, oblong; reniform oblique, linear, rounded at each end, interrupting a short blackish streak; a pale black-bordered slightly undulating exterior transverse line contiguous to the hind end of the reniform spot, and a testaceous apical spot; submarginal line indistinct. Hind wings white, with a slightly brownish border. Length of the body 4 lines; of the wings 9 lines.

a. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

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CELÆNA DELIRIOSA.

Fœm. *Albida; alæ anticæ ex parte cinereæ, linea basali undulata incompleta, linea interiore, linea exteriore undulata fasciaque antica brevi arcuata nigris, orbiculari et reniformi fusco marginatis, illa rotunda; posticæ subæneo marginatæ.*

Female. Whitish. Fore wings partly cinereous, with an undulating incomplete black line near the base; a second line, slight but complete, near the orbicular spot; a third much more undulating, beyond the reniform spot; a slightly curved black band between the orbicular and reniform spots, and contiguous to the latter; orbicular and reniform spots with brown borders, the former round, and about half the size of the latter. Hind wings with slightly æneous borders. Length of the body 5 lines; of the wings 12 lines.

a. St. Domingo. From Mr. Tweedie's collection.

Celæna inclinata.

Mas. *Cervina; antennæ subserratæ; abdomen cinereum; alæ anticæ lineis nigricantibus undulatis diffusis indistinctis, costa albo guttata, venis apices versus nigro marginatis, orbiculari et reniformi albo notatis; posticæ æneo-fuscæ, basi margineque interiore canis, ciliis albidis.*

Male. Fawn-colour. Third joint of the palpi about one-third of the length of the second. Antennæ minutely serrated. Abdomen cinereous. Fore wings with the transverse lines blackish, undulating, diffuse and indistinct; costa with white dots; veins bordered with black towards their tips; orbicular spot with a white mark on its outer side; reniform partly white. Hind wings æneous-brown, hoary at the base and along the interior border; ciliæ whitish. Length of the body 5 lines; of the wings 12 lines.

a. St. Domingo. From Mr. Tweedie's collection.

Celæna semifurca.

Mas. *Fuscescente-cervina, nigro conspersa; abdomen cinereum; alæ anticæ lineis nigris variis, submarginali lata undulata, orbiculari et reniformi albo ex parte marginatis, reniformi albo pupillata guttis exterioribus albis; posticæ æneo-fuscæ, basi margineque interiore canis, ciliis cano marginatis.*

Male. Brownish fawn-colour. Thorax and fore wings speckled with black. Abdomen cinereous. Fore wings with the transverse lines black, various; submarginal line broad, undulating; orbicular and reniform spots with the borders partly white; reniform with a white disk, which is slightly furcate on its exterior side, near which there is a row of white dots. Hind wings æneous-brown, hoary at the base and along the interior border; ciliæ with hoary tips. Length of the body 5 lines; of the wings 12 lines.

a. St. Domingo. From Mr. Tweedie's collection.

Celæna prolifera.

Mas. *Cinereo-fusca; palporum articulus 3us elongatus; alæ anticæ lituris costalibus albidis, venis albo conspersis, linea submarginali albida angulosa incompleta, ciliis albido strigatis, orbiculari et reniformi albido marginatis, hac albo notata; posticæ æneo-fuscæ, basi canæ, ciliis albidis.*

Male. Cinereous-brown. Third joint of the palpi half the length of the second. Abdomen cinereous. Fore wings with some whitish marks along the costa, and with white specks on the veins; submarginal line whitish, zigzag, very incomplete; ciliæ with whitish streaks; orbicular and reniform spots with whitish borders; reniform with a white discal spot, which is accompanied by a white dot on the exterior side. Hind wings æneous-brown, hoary towards the base; ciliæ whitish. Length of the body 5 lines; of the wings 12 lines.

a. St. Domingo. From Mr. Tweedie's collection.

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CELÆNA CONFINIS.

Mas. *Ferrugineo-fusca; palporum articulus 3us brevis; abdomen cinereum; alæ anticæ lineis nigris undulatis indistinctis, orbiculari et reniformi ex parte albis; posticæ cinereæ, margine exteriore subæneo.*

Male. Ferruginous-brown. Third joint of the palpi not more than one-fourth of the length of the second. Abdomen cinereous. Fore wings with the transverse lines black, undulating, slight and indistinct; orbicular and reniform spots partly white. Hind wings cinereous, somewhat æneous along the exterior border. Length of the body 5 lines; of the wings 12 lines.

a. Moreton Bay. From Mr. Diggles' collection.

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PERIGEA? INDECISA.

Fœm. *Testacea; abdomen cinereum; alæ anticæ nigro subconspersæ, maculis lineisque subobsoletis, venis exterioribus nigro duplici serie guttatis; posticæ pallide cinereæ, marginibus latis fuscis, ciliis albidis.*

Female. Testaceous. Abdomen cinereous. Fore wings slightly speckled with black; the usual lines and spots almost obsolete; a double exterior row of blackish dots on the veins. Hind wings pale cinereous, with broad brown borders and whitish ciliæ. Length of the body 6 lines; of the wings 14 lines.

a. Jamaica. From Mr. Gosse's collection.

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PERIGEA CENTRALIS.

Mas. *Pallide cervina; abdomen pallide testaceum; alæ anticæ cervinæ, apud discum subferrugineæ, maculis vix determinatis ex parte albidis cinerascente marginatis, costa margineque exteriore albido punctatis; posticæ canæ, subæneæ, ciliis albidis.*

Male. Pale fawn-colour. Abdomen pale testaceous. Fore wings fawn-colour, somewhat ferruginous in the disk, grayish about the discal spots, which are undefined and partly whitish; costa and exterior border with minute whitish dots. Hind wings houry, with an æneous tinge, which is most prevalent about the exterior border; ciliæ whitish. Length of the body 5½ lines; of the wings 14 lines.

a. ——? Presented by J. G. Children, Esq.

PERIGEA PUNCTOSA.

Mas. *Ferruginea; abdomen pallide cinereum; alæ anticæ lituris costalibus albidis, lineis pallide testaceis indistinctis, guttis discalibus et marginalibus albidis, orbiculari indistincta, reniformi albo pupillata; posticæ cinereæ, margine latissimo æneo, ciliis albidis.*

Male. Ferruginous. Abdomen pale cinereous. Fore wings with white marks along the costa, with the transverse lines pale testaceous, very indistinct, generally accompanied by whitish dots; marginal dots whitish, very minute; orbicular spot indistinct; reniform with a white disk. Hind wings cinereous, with very broad æneous borders; ciliæ whitish. Length of the body 6 lines; of the wings 14 lines.

a. ——? Presented by J. G. Children, Esq.

PERIGEA? CONSTIPATA.

Fœm. *Cervina; alæ anticæ lineis transversis albis inæqualibus, linea marginali obscure fusca strigis albis interrupta, lituris costalibus albis, orbiculari et reniformi albo marginatis, illa maxima informi; posticæ pallide cervinæ, basi albidæ.*

Female. Fawn-colour. Abdomen hardly paler than the thorax. Fore wings with irregular transverse white lines, and with a dark brown marginal line, which is interrupted by white streaks; some white marks along the costa; orbicular and reniform spots

with white borders, the former very large, irregular in outline. Hind wings pale fawn-colour, whitish towards the base. Length of the body 5 lines; of the wings 12 lines.

w. ———? From Mr. Milne's collection.

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CARADRINA CUBICULARIS.

cc. Hindostan. From Archdeacon Clerk's collection.

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RUSINA? DOCILIS.

Mas. *Cinerea; caput fuscum; palpi validi, oblique ascendentes articulo 3o conico brevi; antennæ vix pectinatæ; thorax antice fuscus; alæ anticæ disco fusco, guttis marginalibus nigris, orbiculari et reniformi e guttis duabus nigris, lituris apud marginem interiorem nigris; posticæ cinereæ, ciliis pallidioribus.*

Male. Cinereous. Head dark brown. Proboscis short. Palpi stout, obliquely ascending; third joint conical, not more than one-fourth of the length of the second. Antennæ hardly pectinated. Thorax dark brown in front. Fore wings dark brown, except towards the tips and along the exterior border; marginal dots black; orbicular and reniform spots very indistinct, represented by two black dots; a few black marks along the interior border. Hind wings cinereous, with paler ciliæ. Length of the body 5 lines; of the wings 12 lines.

a. North India. From Capt. Reid's collection.

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AGROTIS SUFFUSA.

zz. St. Domingo. From Mr. Tweedie's collection.

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AGROTIS FENNICA.

h—j. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

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AGROTIS OROPHILA.

Fœm. *Obscure cinerea; alæ anticæ basi nigricantes, ocellis duabus discalibus punctisque submarginalibus nigris.*

Brotis Orophila (Noctua genuina, Agrotis ambigua), *Geyer, Zeit. Samml. Exot. Schmett.* v. 7, 405, f. 809, 810.

Mexico.

AGROTIS REPLETA.

Mas. *Cervina; caput et thorax anticus obscure cinerea, hic lineis undulatis fuscis; palpi nigri; antennæ simplices; alæ anticæ longæ, angustæ, fusco nebulosæ, lineis distinctis cervinis nigro marginatis, macula apicali magna cervina, striga discali interrupta nigra, orbiculari subrotunda, costa exteriore nigra; posticæ albæ, semihyalinæ, costa margineque interiore cervinis.*

Male. Fawn-colour. Head and fore part of the thorax dark cinereous, the latter with brown undulating lines. Palpi black. Antennæ simple. Fore wings long, narrow, shaded with brown; transverse lines distinct, pale fawn-colour, with black borders; a large pale fawn-coloured apical spot; veins black along the exterior border; a black discal streak interrupted by the orbicular spot, and extending between it and the reniform; orbicular almost round, hardly half the size of the reniform; costa black between the reniform spot and the apical mark. Hind wings white, semihyaline, fawn-colour along the costa and along the interior border. Length of the body 10 lines; of the wings 22 lines.

a. Mexico. From M. Sallé's collection.

AGROTIS LIDIA.

Ferruginosa; antennæ luteæ; abdomen cinerascens; alæ anticæ linea subcostali lineisque tribus obliquis undulatis (3a late interrupta) albidis, striga lata discali glaucescente, orbiculari et reniformi lutescentibus albido marginatis; posticæ pallidiores, ciliis albis.

Phalæna-Noctua Lidia, *Cram. Pap. Exot.* iv. 222, pl. 396, f. D.

Berbice.

Agrotis emittens.

Pallidissime cervina; thorax antice fuscescens; alæ anticæ nigro conspersæ, lituris transversis costalibus, lineis indistinctis undulatis guttisque marginalibus nigris, fascia exteriore cervina intus nigro marginata, macula costali subapicali lineaque submarginali fuscis; posticæ albidæ, semihyalinæ, margine æneo-cervino.

Very pale fawn-colour. Thorax brownish in front. Fore wings very slightly and minutely speckled with black, adorned with transverse black marks along the costa, with very slight and indistinct undulating transverse black lines, and with black marginal dots; a dark fawn-coloured band at three-fourths of the length, bounded with black on the inner side, and having a brown costal spot between it and the tip; submarginal line brown, very incomplete. Hind wings whitish, semihyaline, with æneous fawn-coloured borders. Length of the body 8 lines; of the wings 20 lines.

Jamaica. In Mr. Saunders' collection.

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Agrotis Beltis.

Rufa; abdomen fuscum; alæ anticæ cervino variæ, litura discali serpentina albida, fascia obliqua exteriore rosea; posticæ nigro-fuscæ, basi subroseo, margine testaceo.

Phalæna-Noctua Beltis, *Cram. Pap. Exot.* iv. 223, pl. 396, f. 1.
Panolis Beltis, *Hübn. Verz. Schmett.* 214, 2135.

Surinam.

Agrotis hostilis.

Fœm. *Cinerea; abdomen canum; alæ anticæ nigro conspersæ, maculis costalibus lunulisque marginalibus elongatis nigris, lineis transversis nigris et albidis undulatis indistinctis, linea submarginali et macula orbiculari albidis, hac subrotunda; posticæ pallide cinereæ, margine æneo-fusco, ciliis albidis.*

Female. Cinereous. Abdomen hoary. Fore wings slightly flecked with black, with black costal spots, and with elongated black marginal lunules; transverse lines black and whitish, undulating, indistinct; submarginal line whitish; orbicular spot whitish,

almost round, more distinct than the reniform and about half its size. Hind wings pale cinereous, with æneous-brown borders; ciliæ whitish. Length of the body 7½ lines; of the wings 17 lines.

a. Venezuela. From Mr. Dyson's collection.

Agrotis ambrosioides.

Fœm. *Rufescente-ferruginea; thorax cinereo fasciatus; abdomen cinereum; alæ anticæ postice subcinerascentes, lunulis marginalibus nigricantibus indistinctis, rubro marginatis, orbiculari oblonga subquadrata, reniformi vix excavata; posticæ albæ, margine perangusto fusco.*

Noctua ambrosioides, *Moritz, MSS.*

Female. Reddish ferruginous. Thorax with a cinereous band. Abdomen cinereous. Fore wings with a cinereous tinge between the discal spots and the interior border; marginal dots blackish, minute, indistinct; discal spots distinct, with deep red borders; orbicular oblong, subquadrate, more than half the size of the reniform, which is hardly excavated. Hind wings white, with very narrow brown borders. Length of the body 8 lines; of the wings 18 lines.

Venezuela.

a. Bogotà. From Mr. Stevens' collection.

Agrotis consueta.

Mas. *Cinereo-ferruginea; abdomen cinereum; antennæ subciliatæ; alæ anticæ lineis nigricantibus duplicatis undulatis indistinctis, submarginali maculari, lunulis nigris, orbiculari et reniformi pallide cinereis, orbiculari subrotunda; posticæ albidæ, margine fusco.*

Male. Ferruginous, with a cinereous tinge. Antennæ minutely ciliated. Abdomen cinereous. Fore wings with the transverse lines blackish, double, undulating, indistinct; submarginal line macular; marginal lunules black; orbicular and reniform spots pale cinereous, with darker disks; orbicular nearly round, much smaller than the reniform, which is excavated on the outer side. Hind wings whitish; borders brown. Length of the body 7 lines; of the wings 16 lines.

a. Bogotà. From Mr. Stevens' collection.

Agrotis deprivata.

Mas. *Pallide cervina, abdomine pallidissimum; alæ anticæ orbiculari et reniformi indistinctis fusco marginatis, striga discali nigra interrupta, guttis marginalibus nigris minimis; posticæ albæ, iridescentes.*

Male. Pale fawn-colour. Abdomen very pale. Fore wings with the orbicular and reniform spots slightly indicated by their darker borders; a black streak commencing before the orbicular spot, and occupying the space between it and the reniform; marginal dots black, very minute. Hind wings white, iridescent. Length of the body 6 lines; of the wings 14 lines.

a. Valdivia. From Mr. Cuming's collection.

Agrotis semidolens.

Cinerea; abdomen canum, apice testaceum; alæ anticæ fuscæ, dimidio basali costaque exteriore nigricantibus, basi costaque albido notatis, orbiculari et reniformi indistinctis albido marginatis, guttis marginalibus nigris; posticæ albæ, costa margine venisque fuscis.

Cinereous. Abdomen hoary, testaceous at the tip. Fore wings brown, blackish from near the base to beyond the discal spots and along the exterior half of the costa; base and costa with whitish marks; discal spots indistinct, with whitish borders; marginal dots black. Hind wings white, brown along the costa, and with a slender brown border; veins brown. Length of the body 9 lines; of the wings 20 lines.

Valley of the Amazon.

a. Bogotà. From Mr. Stevens' collection.

Agrotis hirtipalpis.

Mas. *Obscure ferruginea; palpi nigri, pilosissimi; antennæ nigræ, ciliatæ; abdomen basi canum; alæ anticæ ferrugineæ cano conspersæ, lineis undulatis canis ferrugineo marginatis, orbiculari obsoleta, reniformi indistincta, guttis marginalibus nigris; posticæ albæ, lunulis marginalibus elongatis nigricantibus.*

Male. Dark ferruginous. Palpi black, very pilose. Antennæ black, ciliated. Abdomen paler than the thorax, hoary towards the

base. Fore wings ferruginous, flecked with hoary, adorned with hoary undulating lines, which have dark ferruginous borders; orbicular spot obsolete; reniform very indistinct; marginal dots black. Hind wings white, with elongated blackish marginal lunules. Length of the body 7½ lines; of the wings 20 lines.

Bogotà. In Mr. Saunders' collection.

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AGROTIS IGNICOLLIS.

Fœm. *Pallidissime viridis; palpi extus nigri; thorax rufescente cervinus, fascia antica nigra; alæ anticæ nigro subconspersæ, lunulis marginalibus maculisque tribus costalibus magnis subquadratis nigris; posticæ albidæ, fusco apud costam conspersæ, guttis marginalibus nigris.*

Female. Very pale green. Palpi mostly black on the outer side. Thorax reddish fawn-colour, with a black band in front Fore wings very slightly speckled with black, with a row of black marginal lunules, and with three large black subquadrate costal spots, which have some black marks between them. Hind wings whitish, speckled with brown in front; marginal dots black. Length of the body 7 lines; of the wings 18 lines.

Port Natal. In Mr. Saunders' collection.

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Dele AGROTIS BASIOLAVIS.

The specimen described is *Ochropleura flammatra.*

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AGROTIS PLAGIATA.

Mas. *Testacea; palporum articulus 2us fuscus, vertex cervinus; antennæ simplices; abdomen alas posticas superans; alæ anticæ sat angustæ, antice fusco notatæ, orbiculari obsoleta, reniformi magna fusca subquadrata non excavata, margine exteriore fusco; posticæ cinereæ.*

Male. Testaceous. Second joint of the palpi brown. Vertex of the head fawn-colour. Antennæ simple. Abdomen extending

somewhat beyond the hind wings. Fore wings rather narrow, with brown marks on the fore part; orbicular spot obsolete; reniform large, brown, subquadrate, not excavated; exterior border wholly brown. Hind wings cinereous. Length of the body 7 lines; of the wings 16 lines.

a. Ceylon. From the Rev. J. Wenham's collection.

Agrotis flagifera.

Cervina; abdomen pallidum; alæ anticæ fusco subconspersæ, lineis transversis fuscis subobsoletis, plaga magna costali subtrigona fusca, guttis exterioribus et marginalibus nigris.

Female. Fawn-colour. Thorax and fore wings slightly speckled with brown. Abdomen paler. Fore wings with the usual transverse lines brownish red, almost obsolete; a large nearly triangular brownish red patch joining the costa and concealing the reniform spot; two rows of black dots, one exterior, the other marginal. Hind wings pale æneous-brown; costa and ciliæ whitish. Length of the body 8 lines; of the wings 20 lines.

a. Ceylon. Presented by R. Templeton, Esq.

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Agrotis cordata.

Mas. *Pallide cervina; antennæ subpectinatæ; thorax nigro fasciatus; abdomen pallide cinereum; alæ anticæ nigro conspersæ, lituris costalibus nigris, striga discali interrupta, nigricante, lineis subobsoletis, submarginali pallida, margine exteriore ex parte fusco, orbiculari et reniformi albido marginatis, orbiculari oblonga, reniformi albido guttata; posticæ canæ.*

Male. Pale dull fawn-colour. Antennæ slightly pectinated. Thorax with a slender black band in front. Abdomen pale cinereous. Fore wings slightly speckled with black, with some black marks along the costa, and with a blackish discal streak, which is interrupted by the spots; transverse lines almost obsolete; submarginal line pale; exterior border partly brown; orbicular and reniform with whitish borders; orbicular oblong, much smaller than the reniform, which has a whitish dot near its exterior side. Hind wings hoary, with brownish borders; ciliæ whitish; under side with

a large black apical spot. Length of the body 7 lines; of the wings 16 lines.

a. Australia. Presented by H. G. Harrington, Esq.

Agrotis repanda.

Fœm. *Fuscescente-cinerea; palpi nigri et albidi; thorax albido fasciatus; abdomen testaceo-albidum; tarsi albo cincti; alæ anticæ latiusculæ, lineis albidis angulosis nigro marginatis, lunulis marginalibus nigris trigonis, orbiculari subfusiformi; posticæ fuscæ, ciliis albidis.*

Female. Brownish cinereous. Palpi black and whitish. Thorax with a whitish band. Abdomen testaceous-white. Tarsi with white bands. Fore wings rather broad; transverse lines whitish, with black borders, zigzag or forming lanceolate streaks; marginal dots black, triangular; orbicular spot much elongated, subfusiform. Hind wings brown; ciliæ whitish. Length of the body 8—9 lines; of the wings 18—20 lines.

a, *b*. Australia. Presented by Major-General Hardwicke.

Agrotis nullifera.

Mas. *Pallide cervina; abdomen pallidissimum; antennæ serratæ; alæ anticæ guttis indistinctis obscurioribus exterioribus; posticæ pallidissime cervinæ, nitentes.*

Male. Pale fawn-colour. Abdomen very pale. Antennæ serrated. Fore wings without any marks, excepting an indistinct darker dot on each of the exterior veins. Hind wings very pale fawn-colour, shining. Length of the body 10 lines; of the wings 24 lines.

a. New Zealand. From Mr. Earl's collection.

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For Agrotis insignata (nomen bis lectum), *read* Agrotis illata.

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SPÆLOTIS SIBIRICA.

Agrotis corrosa? *Herr.-Schæff. Schmett. Eur.* ii. 333, 455, pl. 29, f. 141.

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OPIGENA POLYGONA.

Opigena polygona, *Herr.-Schæff. Schmett. Eur.* ii. 329, 448.

OPIGENA REPANDA.

Cinereo-fusca; alæ anticæ lineis transversis et macularum obscurarum marginibus albidis, claviformi obsoleta; posticæ margine latissimo nigro-cinereo, ciliis pallidis.

Opigena repanda, *Herr.-Schæff. Schmett. Eur.* ii. 330, 449, pl. 13, f. 61.

Crimea.

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TRIPHÆNA SEMIHERBIDA.

Mas. *Viridis; caput et thorax albo fasciata; palporum articulus 2us fasciculatus; abdomen cinereum; alæ anticæ ex parte fuscæ, lineis undulatis, striga subcostali subapicali lunulisque marginalibus elongatis nigris, gutta basali alba, orbiculari et reniformi nigro alboque ex parte marginatis, illa subrotunda; posticæ luteæ, macula discali magna fasciaque lata cupreo-fuscis.*

Male. Green. Head and thorax with white bands. Second joint of the palpi with a long tuft beneath. Abdomen cinereous. Fore wings partly brown; transverse lines undulating, green or brown, according as the opposite colour predominates; a black subcostal subapical streak, and elongated black marginal lunules; a white basal dot; orbicular and reniform spots partly bordered with black and white, the former nearly round, much smaller than the latter. Hind wings luteous; a large discal spot and a broad band cupreous-brown; extreme border and ciliæ luteous. Length of the body 7 lines; of the wings 18 lines.

a. North India. From Capt. Reid's collection.

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GRAPHIPHORA AUGUR.

aa—hh. Trenton Falls, New York. Presented by E. Doubleday, Esq.

ii. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

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GRAPHIPHORA ILLAPSA.

Fœm. *Subferrugineo-cinerea; palpi nigro-fusci, apice pallidi; thorax antice nigro fasciatus; abdomen cinereum; alæ anticæ nigro conspersæ, lituris costalibus lineisque valde incompletis nigris, orbiculari obsoleta, reniformi e lituris nigris, fasciis duabus latis ferrugineis lineaque intermedia albida exterioribus; posticæ cinereæ, ferrugineo marginatæ.*

Female. Cinereous, with a slight ferruginous tinge. Palpi blackish brown, with pale tips. Thorax with a black band in front. Abdomen cinereous. Fore wings minutely speckled with black, with black costal marks, and with very incomplete black transverse lines; orbicular spot obsolete; reniform indicated by some black marks; a broad exterior ferruginous band, partly divided by a whitish line from the pale ferruginous marginal band. Hind wings cinereous, ferruginous towards the borders. Length of the body 14 lines; of the wings 6 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

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GRAPHIPHORA MAJA.

a. Rio Janeiro. From Mr. Stevens' collection.

GRAPHIPHORA SOBRIA.

Fœm. *Murina; palporum articulus 3us conicus, brevissimus; abdomen cinereum; alæ anticæ lineis nigris undulatis indistinctis, orbiculari et reniformi nigro marginatis; orbiculari suboblonga; posticæ cinereæ.*

Female. Mouse-colour. Third joint of the palpi conical, not one-fourth of the length of the second. Abdomen cinereous. Fore

wings with the transverse lines black, undulating, indistinct; orbicular and reniform spots with black borders; orbicular slightly oblong, hardly half the size of the reniform. Hind wings cinereous, hardly paler than the fore wings; under side with the usual discal dot and line. Length of the body 6 lines; of the wings 16 lines.

a. Bogotà. From Mr. Stevens' collection.

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GRAPHIPHORA? QUADRATA.

Mas. *Ferruginea; palpi caput superantes, articulo 2o valido oblique truncato, 3o gracili longi-conico; abdomen subcinereo-ferrugineum; alæ anticæ murino tinctæ lituris obsoletis aut subobsoletis, margine exteriore vix obliquo; posticæ subæneo-cinereæ.*

Male. Ferruginous. Palpi extending somewhat beyond the head; second joint stout, obliquely truncated; third slender, elongate-conical, not one-fourth of the length of the second. Abdomen pale ferruginous, slightly cinereous. Fore wings slightly suffused with mouse-colour; all the marks obsolete, or almost so; exterior border hardly oblique. Hind wings cinereous, with an æneous tinge. Length of the body 6 lines; of the wings 14 lines.

a. Tasmania. From Mr. A. J. Smith's collection.

GRAPHIPHORA? FACILIS.

Mas. *Murina; caput et thorax anticus nigro fasciata; palporum articulus 3us cylindricus; antennæ simplices; abdomen cinereum; alæ anticæ lineis albidis et nigris subobsoletis, orbiculari obsoleta, reniformi albido marginata; posticæ subæneo-cinereæ, ciliis albidis.*

Male. Mouse-colour. Head and fore part of the thorax with black bands. Third joint of the palpi cylindrical, one third of the length of the second. Antennæ simple. Abdomen cinereous. Fore wings with the transverse lines whitish and black, almost obsolete; orbicular spot obsolete; reniform slightly distinguished by its whitish border. Hind wings cinereous, with an æneous tinge; ciliæ whitish. Length of the body 7 lines; of the wings 16 lines.

a. Tasmania. Presented by J. G. Children, Esq.

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GRAPHIPHORA INFICITA.

Mas. *Cervina; abdomen testaceum; alæ anticæ lineis transversis ferrugineis angulosis valde indistinctis, linea mediana obscuriore, submarginali pallida, orbiculari subobsoleta, reniformi pallido marginata, macula postica contigua nigricante; posticæ æneo-fuscæ, ciliis testaceis.*

Male. Fawn-colour. Abdomen testaceous. Fore wings with the transverse lines ferruginous, angulose, very indistinct; exterior median line a little darker than the others; submarginal line pale; orbicular spot almost obsolete; reniform distinguished by a pale border, and having a contiguous blackish spot behind it; veins darker towards the tips. Hind wings æneous-brown; ciliæ testaceous. Length of the body 6 lines; of the wings 15 lines.

a. ———?

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ORTHOSIA INSCIENS.

Fœm. *Cinerea; alæ anticæ lineis transversis undulatis albidis et ferrugineis subobsoletis, linea distincta albida submarginali; orbiculari et reniformi nigricantibus albido marginatis, illa magna subrotunda, guttis exterioribus lunulisque marginalibus nigris.*

Female. Cinereous. Fore wings with the usual transverse undulating lines whitish and ferruginous, and very indistinct; a much more distinct whitish submarginal line; orbicular and reniform spots blackish, with whitish borders, the former large, nearly round; a row of exterior black dots and another of black marginal lunules. Length of the body 6 lines; of the wings 16 lines.

a. United States. Presented by E. Doubleday, Esq.

ORTHOSIA SINENS.

Fœm. *Alba; alæ anticæ cinereo notata, gutta basali, guttis costalibus strigaque interrupta nigris, orbiculari et reniformi obsoletis; posticæ subæneæ, ciliis albis.*

Female. White. Fore wings with some cinereous marks of various size along the costa and in the disk; a black dot near the

base, two or three along the costa, and an irregular and interrupted black streak at some distance in front of the interior angle; orbicular and reniform spots obsolete. Hind wings slightly æneous; ciliæ white. Length of the body 5 lines; of the wings 14 lines.

a. Hindostan. From Archdeacon Clerk's collection.

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ORTHOSIA SUBNIGRA.

Mas. *Cana, subtus nigra; palpi nigri, apice albi; antennæ vix ciliatæ; alæ anticæ nigro subconspersæ, costa nigro biguttata aut triguttata, lineis transversis subobsoletis, orbiculari e gutta nigra, reniformi fusca extus valde excavata, gutta contigua lutea; posticæ cinereæ.*

Female. Hoary, black beneath. Antennæ very minutely ciliated. Palpi black, white towards the tips. Thorax and fore wings with very minute black speckles. Fore wings with two or three black dots on the costa; transverse lines almost obsolete; orbicular spot distinguished by a black dot; reniform brown, much excavated on the outer side, where it is accompanied by a luteous dot. Hind wings cinereous, black beneath, like the fore wings; each of the four wings beneath with an indistinct deep black lunule. Length of the body 6 lines; of the wings 14 lines.

a. Australia. Presented by E. Doubleday, Esq.
b. Moreton Bay. From Mr. Diggles' collection.

ORTHOSIA? LUNIFERA.

Fœm. *Cinerea; alæ anticæ nigro conspersæ, lineis transversis angulosis nigris indistinctis aut subobsoletis, claviformi et orbiculari subobsoletis, reniformi nigra lunata; posticæ subtus gutta discali lineaque antice dilatata fuscis.*

Female. Cinereous. Thorax and fore wings minutely speckled with black. Fore wings with the usual transverse lines black, zigzag, indistinct or incomplete; claviform and orbicular spots almost obsolete; reniform distinguished by a black lunule. Hind wings beneath with a brown discal dot, and a brown line which is dilated about the tip. Length of the body 6 lines; of the wings 14 lines.

a. Adelaide. Presented by the Entomological Club.

Orthosia infensa.

Fœm. *Ferrugineo-rufa; palpi ascendentes, articulo 3o cylindrico; thorax cristatus, fascia antica alba nigro marginata, maculis humeralibus albis; abdomen pallide cervinum; alæ anticæ albo notatæ, orbiculari obsoleta, reniformi e litura alba; posticæ subæneæ, basi cinereæ, ciliis albidis.*

Female. Ferruginous-red. Palpi ascending; third joint cylindrical, not more than one-fourth of the length of the second. Thorax crested, with a white black-bordered band in front, joining a white humeral spot. Abdomen pale fawn-colour. Fore wings with a few white marks along the costa and on some of the veins; orbicular spot obsolete; reniform slightly indicated by a white mark. Hind wings somewhat æneous, cinereous towards the base; ciliæ whitish. Length of the body 6 lines; of the wings 16 lines.

a. New Zealand. From Mr. Earl's collection.

Orthosia? semisigna.

Subtestaceo-cinerea; thoracis fasciculus e pilis erectis apice fuscis; alæ anticæ nigro conspersæ, litura postica nigra, reniformi fusca quadrata nigro marginata, orbiculari indistincta extus nigro lineata; posticæ fasciis duabus obscurioribus.

Cinereous, with a very slight testaceous tinge. Thorax with a tuft of upright brown-tipped hairs. Fore wings with black speckles, and with a black mark near the posterior angle; reniform spot brown, quadrangular, narrower hindward, bordered with black; orbicular indistinct, with a black line on its exterior side; a minute black mark behind it. Hind wings with two darker bands. Length of the body 6 lines; of the wings 14 lines.

a. ——— ? Presented by E. Doubleday, Esq.

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Xanthia gilvago.

Var.? *Pallide lutea; abdomen albido-testaceum; alæ anticæ gutta basali nigra, lineis nigricantibus undulatis interruptis, litura postica nigricante, orbiculari, reniformi lineisque interioribus subobsoletis, ciliis nigro guttatis; posticæ albæ, testaceo marginatæ.*

Pale luteous. Abdomen whitish testaceous. Fore wings with a black dot at the base; transverse lines blackish, undulating, interrupted; a blackish mark behind the reniform spot, which, like the orbicular and the interior lines, is almost obsolete; exterior lines more distinct; ciliæ with blackish dots. Hind wings white, with testaceous borders.

h. Europe. From Mr. Milne's collection.

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XANTHIA SPURCATA.

Mas. *Luteo-cervina; abdomen cinereum, apice cervinum; alæ anticæ lituris basalibus indistinctis nigricantibus, dimidio exteriore obscure cervino, fasciis duabus guttisque nigricantibus, lunulis marginalibus nigricantibus attenuatis, orbiculari et reniformi obsoletis; posticæ nigricante æneæ, costa ciliisque pallide luteis.*

Male. Luteous fawn-colour. Abdomen cinereous, except at the tip. Fore wings with some indistinct blackish marks near the base; exterior half dark fawn-colour, with two blackish bands, between which there are some blackish dots; marginal lunules blackish, attenuated; orbicular and reniform spots obsolete. Hind wings blackish æneous; costa and ciliæ pale luteous. Length of the body 5½ lines; of the wings 13 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

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XANTHIA? PALES.

Alæ luteæ, fusco ciliatæ, anticæ basi subvittata striga transversa punctoque exteriore fuscis.

——— ———, *Drury*, *Ins.* i. 47, pl. 23, f. 3.
Phalæna-Noctua Pales, *Drury*, *App.* ii.
Noctua Pales, *Westw.* *Drury*, i. 43, pl. 23, f. 3.

St. Christopher.

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CIRRŒDIA VARIOLOSA.

Mas. *Lutea; alæ anticæ pallide flavæ luteo conspersæ, extus pallide purpurascentes, fascia intermedia fusca fasciisque duabus luteo-fulvis, lineis fuscis angulosis, orbiculari fusca pallide pupillata, reniformi ex parte pallida; posticæ pallidissime cervinæ, ciliis albo marginatis.*

Male. Luteous. Abdomen paler than the thorax. Fore wings pale yellow, with luteous speckles from the base to the middle; exterior half lilac, with a brown intermediate band, and with two luteous fawn-coloured bands, one marginal, the other adjoining the brown band, and not extending beyond the middle from the costa; lines brown, angular, the exterior one bounding the short band; orbicular spot brown, round, with a pale central mark; reniform partly pale, its outline indistinct. Hind wings very pale fawn-colour; ciliæ with white borders, like those of the fore wings. Length of the body 5 lines; of the wings 12 lines.

a. North India. Presented by General Hearsay.

CIRRŒDIA EDENTATA.

Mas. *Lutea; caput cristatum; abdomen testaceum; alæ anticæ lineis quatuor ferrugineis, 1a 2aque connexis, 3a 4aque abbreviatis, fascia exteriore diffusa pallide purpurascente, ciliis albo marginatis, orbiculari parva alba transversa fusco marginata, reniformi subobsoleta, angulo marginis exterioris conspicuo; posticæ testaceæ, apud costam albæ.*

Male. Luteous. Head tufted. Abdomen testaceous. Fore wings with four irregular transverse ferruginous lines, the first and the second united by the hind border, the third and fourth not extending beyond the middle of the wing from the costa; a diffuse lilac band between the fourth line and the exterior border, almost obsolete hindward; ciliæ with white borders; orbicular spot small, white, transverse, with a brown border; reniform almost obsolete; exterior border with a conspicuous angle. Hind wings testaceous, white along the costa. Length of the body 5½ lines; of the wings 13 lines.

a. Tasmania. From Mr. Wood's collection.

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For Isle of Oute, *read* Isle of Crete.

Page .

DIANTHÆCIA LUTEIFRONS.

Mas. *Cinerea; caput luteum; abdomen apice fuscescens; alæ anticæ nigro-fuscæ, litura basali alba, lituris duabus albis antice obsoletis, 1a interiore, 2a exteriore, magis undulata, fascia exteriore lutea, linea submarginali pallide flava, orbiculari et reniformi albo flavoque variis, costa luteo notata, margine exteriore albo conspersa, lunulis marginalibus nigris; posticæ cinereæ, linea discali fasciaque marginali latissima obscurioribus.*

Male. Cinereous. Head luteous. Abdomen brownish at the tip. Fore wings blackish brown, with a white mark at the base, and with two white lines, which are obsolete in front; the first interior, less undulating than the other, which is exterior, and is accompanied by a more exterior luteous band, beyond which is the pale yellow submarginal line; orbicular and reniform spots varied with white and pale yellow; costa with luteous marks; exterior border sprinkled with white; marginal lunules black. Hind wings cinereous, with the discal line and the very broad marginal band darker. Length of the body 6 lines; of the wings 14 lines.

North India. In the East India Company's collection.

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EUPLEXIA CONFUNDENS.

c. Moreton Bay. From Mr. Diggles' collection.

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EUROIS REPUGNANS.

Fœm. *Cinerea, olivaceo-viridi subtincta; abdomen fusco-cinereum; alæ anticæ fusco conspersæ, fascia angusta indistincta interiore undulata, plaga costali trigona, linea exteriore obliqua guttulari, fascia guttisque marginalibus fuscis, margine exteriore denticulato; posticæ cupreo-fuscæ, ciliis albido marginatis.*

Female. Cinereous, with a slight tinge of olive-green. Abdomen brownish cinereous. Fore wings slightly speckled with brown, with a slender indistinct interior undulating brown band, with a triangular brown patch on the middle of the costa, and with an exterior transverse oblique line of dark brown dots; a brown band and a row of dark brown dots along the exterior border, which is very distinctly denticulated. Hind wings cupreous-brown, pale in front; ciliæ with whitish borders. Length of the body 9 lines; of the wings 22 lines.

Hindostan. In the East India Company's collection.

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For Hadena sulceris, *read* Hadena suberis.

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HADENA LEUCODON.

a, *b*. Europe. From M. Becker's collection.

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HADENA W-LATINUM.

p—*r*. Europe. From M. Becker's collection.

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HADENA DETRACTA.

Mas. *Fuscescente-cinerea; palpi porrecti, articulo 3o conico brevissimo; antennæ serratæ, ciliatæ; abdomen cinereum, cristatum; alæ anticæ lineis nigricantibus undulatis incompletis; lunulis marginalibus elongatis, claviformi fusca nigro conspersa et marginata, orbiculari et reniformi cinereis nigro marginatis, illa oblonga subobliqua; posticæ cinereæ.*

Male. Brownish cinereous. Palpi porrect; third joint conical, not more than one-fourth of the length of the second. Antennæ serrated and ciliated. Abdomen crested, cinereous. Fore wings with the transverse lines blackish, undulating and incomplete; marginal lunules elongated; claviform spot brown, speckled with black, and with a black border; orbicular and reniform cinereous, bordered with black, the former oblong, slightly oblique, more than

half the size of the reniform, which is slightly excavated on the exterior side. Hind wings cinereous. Length of the body 5 lines; of the wings 14 lines.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

Hadena claudens.

Mas. *Cana; abdomen cinereum; alæ anticæ ex parte cinereo nebulosæ et nigro conspersæ, lituris costalibus nigricantibus, lineis nigris undulatis incompletis, ex parte nigro marginatis, orbiculari magna obliqua; posticæ fuscescente-cinereæ, ciliis albidis.*

Male. Hoary. Abdomen cinereous. Fore wings slightly and incompletely shaded with gray and speckled with black, with blackish marks along the costa, and with undulating and incomplete blackish transverse lines; orbicular and reniform spots white, partly bordered with black; orbicular spot oblique, large, rather smaller than the reniform, which is slighted excavated on its exterior side. Hind wings brownish cinereous, with whitish ciliæ. Length of the body 6 lines; of the wings 14 lines.

a. Newfoundland. Presented by W. C. St. John, Esq.

Hadena albifusa.

Mas et fœm. *Testacea; palpi ascendentes, articulo 3o conico brevissimo; abdomen albido-testaceum; alæ anticæ albidæ, basi fasciisque duabus exterioribus cervinis, lineis transversis undulatis incompletis, strigis paucis exterioribus lunulisque marginalibus nigris, maculis nigro marginatis, orbiculari obliqua fusiformi aut subovata; posticæ cinereæ, margine lato æneo-fusco, ciliis albis.*

Male and female. Testaceous. Palpi ascending; third joint conical, not one-fourth of the length of the second. Abdomen whitish testaceous. Fore wings whitish, varied with fawn-colour, which occupies the basal part, excepting the costa, and forms two exterior bands; costa with black marks; transverse lines black, undulating, irregular and incomplete; a few exterior black streaks interrupted by the submarginal line, which is pale and zigzag; marginal lunules black; discal spots with black borders; orbicular oblique, fusiform or nearly oval, about half the size of the reniform,

which is slightly excavated on the exterior side. Hind wings cinereous, with broad æneous-brown borders; ciliæ white. Length of the body 6—6½ lines; of the wings 15—16 lines.

a—c. Nova Scotia. From Lieut. Redman's collection.

Hadena contenta.

Fœm. *Ferruginea; palpi oblique ascendentes, articulo 3o cylindrico; abdomen cinereum; alæ anticæ lineis medianis nigris undulatis, venis nigris albo conspersis, fascia exteriore incompleta nigricante-cinerea, lunulis marginalibus nigris connexis, macula magna apicali testacea, macularum marginibus nigris albo conspersis, claviformi et reniformi nigricante-cinereis, orbiculari oblonga subelliptica; posticæ pallide cinereæ, margine lato nigricante-cinereo, ciliis testaceis.*

Female. Ferruginous. Palpi obliquely ascending; third joint cylindrical, about one-third of the length of the second. Abdomen cinereous. Fore wings with the median transverse lines black, slight and undulating; veins black, speckled with white; an incomplete blackish cinereous band along the exterior border, which is denticulated; marginal lunules black, connected; a large testaceous apical spot; discal spots with black white-speckled borders; claviform and reniform blackish cinereous, the latter slightly excavated on the exterior side, much larger than the orbicular, which is elongated and nearly elliptical. Hind wings pale cinereous, with broad blackish gray borders; ciliæ testaceous. Length of the body 8 lines; of the wings 20 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

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Hadena? Cedica.

Ferruginea; alæ anticæ venis, linea transversa postica, fascia arcuata interiore, fascia exteriore antice furcata guttisque submarginalibus albis; posticæ marginatæ, macula apud angulum interiorem alba.

Phalæna-Noctua Cedica, *Cram. Pap. Exot.* iv. 42, pl. 310, f. E.

Surinam.

Hadena subjecta.

Mas. *Testacea; thorax fasciis duabus nigris late interruptis; alæ anticæ fascia obscuriore media obliqua nigro marginata et interlineata, lituris costalibus strigisque exterioribus nigris, linea submarginali albida undulata indistincta; orbiculari et reniformi magnis subrotundis subæqualibus nigro marginatis; posticæ albæ, fusco marginatæ.*

Male. Testaceous. Thorax with two widely interrupted black bands. Fore wings with a darker oblique middle band, which is bounded and interlined with black; the usual black marks along the costa, and black streaks along the exterior border; submarginal line whitish, undulating, indistinct; orbicular and reniform spots large, nearly round, almost equal in size, mostly bordered with black. Hind wings white; exterior border and adjoining part of the fore wings brown. Length of the body 5 lines; of the wings 12 lines.

Brazil. In Mr. Saunders' collection.

Hadena aperiens.

Nigro-fusca; palpi ascendentes; articulus 3us cylindricus, 2i trienta non brevior; abdomen cinereum; alæ anticæ fascia lata ligno-fusca antice abbreviata, orbiculari et reniformi ligno-fusco interlineatis et marginatis, orbiculari rotunda, reniformi obliqua peranguata, linea duplicata exteriore obscure fusca, linea submarginali undulata cervina; posticæ albidæ, linea marginali duplicata fusca.

Blackish brown. Palpi ascending; third joint cylindrical, about one-third of the length of the second. Abdomen cinereous. Fore wings with a broad wood-brown-coloured band, which is abbreviated in front about the orbicular and reniform spots, which are interlined and bordered with wood-brown colour; orbicular round; reniform oblique, very narrow; a double dark brown line just beyond the reniform, and an undulating fawn-coloured submarginal line. Hind wings whitish, with a double brown marginal line. Length of the body 5—5½ lines; of the wings 11—12 lines.

a—c. Venezuela. From Mr. Dyson's collection.

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HADENA EXTERNA.

Mas. *Testacea; palpi porrecti, articulo 3o conico minimo; alæ anticæ striga basali, lituris costalibus, strigis submarginalibus lunulisque marginalibus nigris, linea exteriore obliqua angulata, maculis ex parte nigro marginatis, orbiculari magna, reniformi obliqua non excavata.*

Male. Testaceous. Palpi porrect, not extending beyond the head; third joint conical, very minute, less than one-fourth of the length of the second. Fore wings with a black basal streak, with black marks along the costa, with submarginal black streaks, and with black marginal lunules; transverse lines obsolete, except an exterior one, which is oblique, and forms an acute angle near the hind border; discal spots partly bordered with black; orbicular large, a little smaller than the reniform, which is oblique and not excavated. Length of the body 5 lines; of the wings 12 lines.

a. South Africa. Presented by Dr. A. Smith.

HADENA MEDIA.

Mas. *Obscure ferruginea; caput et thorax anticus pallide ferruginea; palporum articulus 3us minimus; antennæ simplices; abdomen testaceum, cristis basalibus nigris; alæ anticæ apud medium nigro-cinerascentes, lineis transversis nigris anguloso incompletis, orbiculari et reniformi nigro ex parte marginatis, illa oblonga elliptica; linea submarginali pallida anguloso, guttis marginalibus magnis nigris; posticæ albæ, margine perangusto fusco.*

Male. Dark ferruginous. Head and fore part of the thorax pale ferruginous. Third joint of the palpi very minute. Antennæ simple. Abdomen testaceous, extending somewhat beyond the hind wings, with blackish crests towards the base. Fore wings with a blackish gray tinge in the middle; transverse lines black zigzag, incomplete; orbicular and reniform spots partly bordered with black; the former oblong, elliptical, a little smaller than the latter, which is very slightly excavated; submarginal line pale, angulose; marginal dots large, black. Hind wings white, with a very narrow

dark brown border. Length of the body 6 lines; of the wings 13 lines.

Canara. In the East India Company's collection.

Hadena retrahens.

Mas. *Fuscescente-cinerea; palpi ascendentes, articulo 3o minimo; abdomen cinereum; alæ anticæ ex maxima parte fuscæ, lineis albidis nigro marginatis, interiore subundulata, exteriore costam versus retracta, margine exteriore denticulato subaurato, orbiculari et reniformi nigro albidoque marginatis, illa oblonga; posticæ æneo-fuscæ, basi cinereæ.*

Male. Brownish-cinereous. Palpi ascending; third joint very minute, not one-fourth of the length of the second. Abdomen cinereous. Fore wings mostly brown; the lines whitish, with black borders, the interior one slightly undulating, the exterior one abruptly angular and retracted in front, and joining the front of the reniform spot; between this line and the denticulated exterior border the wings are slightly gilded; orbicular and reniform spots with black and whitish borders, the former oblong, not more than half the size of the latter, which is much excavated on the exterior side. Hind wings æneous-brown, cinereous towards the base. Length of the body 6 lines; of the wings 14 lines.

Ceylon. In the East India Company's collection.

Hadena confundens.

Mas. *Ferrugineo-fusca: palpi porrecti, articulo 3o cylindrico longiusculo; antennæ simplices; alæ anticæ lineis nigricantibus diffusis undulatis indistinctis, guttis marginalibus indistinctis, margine exteriore integro, orbiculari et reniformi subobsoletis; posticæ æneo-fuscæ, basi cinereæ, ciliis testaceis.*

Male. Ferruginous-brown. Palpi porrect; third joint cylindrical, full one-third of the length of the second. Antennæ simple. Fore wings with the transverse lines blackish, diffuse, undulating, indistinct; marginal dots also indistinct; exterior border entire; orbicular and reniform spots almost obsolete. Hind wings æneous-brown, cinereous towards the base; ciliæ testaceous. Length of the body 6 lines; of the wings 14 lines.

Ceylon. In the East India Company's collection.

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HADENA LIGNANA.

Mas. *Pallidissime cervina; palporum articulus 3us minimus; antennæ vix ciliatæ; thorax et abdomen cristata, ille vittis obliquis angustis vittisque duabus latioribus humeralibus nigris; alæ anticæ basi fusco conspersæ, maculis tribus diffusis marginalibus fuscis, strigis costalibus lunulisque marginalibus nigris, maculis discalibus fusco marginatis, orbiculari oblonga subfusiformi basi fusco strigata, reniformi nigricante pupillata non excavata, linea submarginali pallida; posticæ fuscescente-cinereæ, ciliis pallidis.*

Male. Very pale fawn-colour. Third joint of the palpi not more than one-fourth of the length of the second. Antennæ very minutely ciliated. Thorax and abdomen crested. Thorax with slight oblique black stripes, and with two broader humeral stripes. Fore wings slightly streaked with brown towards the base, with three diffuse brown spots on the exterior border, with black marks along the costa, and with black marginal lunules; the three discal spots distinct, with brown borders; orbicular oblong, subfusiform, with a brown streak at its base; reniform not excavated, with a blackish disk; submarginal line pale, irregular, traversing the marginal spots. Hind wings brownish cinereous, with pale ciliæ. Length of the body 7 lines; of the wings 16 lines.

a. New Zealand. From Mr. Earl's collection.

HADENA ILLOCATA.

Mas. *Fusca; palpi oblique ascendentes, articulo 3o brevi cylindrico; antennæ subpectinatæ; alæ anticæ lineis albidis undulatis nigro marginatis, venis basi nigris, lunulis marginalibus nigris elongatis, orbiculari et reniformi albidis nigro marginatis, orbiculari obliqua longi-elliptica, reniformi non excavata; posticæ cinereo-fuscæ, lineis duabus obscurioribus.*

Male. Brown. Palpi obliquely ascending: third joint cylindrical, more than one-fourth of the length of the second. Antennæ slightly pectinated. Fore wings with the transverse lines whitish, undulating, bordered with black; veins black towards the base; marginal lunules black, somewhat elongated; orbicular and reniform spots mostly whitish, with black borders; orbicular oblique,

elongate-elliptical, much smaller than the reniform, which is not excavated. Hind wings cinereous-brown, with two indistinct darker lines. Length of the body 6 lines; of the wings 15 lines.

a. ——— ?

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CLOANTHA RADIOSA.

a, *b*. Europe. From M. Becker's collection.

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LITHOMIA SOLIDAGINIS.

s, *t*. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

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XYLINA SPOLIATA.

Mas. *Albido-testacea; caput fusco fasciatum; palpi porrecti, articulo 3o conico brevissimo; thorax et abdomen nigro subconspersa; alæ anticæ substrigatæ, maculis duabus marginalibus magnis fuscis, lituris costalibus nigricantibus, guttis marginalibus nigris, strigis duabus discalibus (antica interrupta) fuscis; orbiculari obliqua oblonga; posticæ margine fuscescente, lunulis marginalibus attenuatis obscure fuscis.*

Male. Whitish-testaceous. Head with a brown band. Palpi porrect; third joint conical, not more than one-fourth of the length of the second. Antennæ serrated. Thorax and abdomen slightly flecked with black, the latter extending somewhat beyond the hind wings. Fore wings slightly streaked with two large brown spots on the exterior border, with blackish marks along the costa, and with black marginal dots; exterior veins with black or brown marks; a slight black basal line; a brown discal streak interrupted by the orbicular spot, which is oblique and oblong, and somewhat smaller than the reniform; a brown or black streak behind them. Hind wings with brownish borders; marginal lunules dark brown, attenuated. Length of the body 5½ lines; of the wings 13 lines.

a, *b*. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

Xylina commoda.

Fœm. *Ferruginea-fusca; palpi porrecti, articulo 3o conico brevissimo; thorax subfasciatus; abdomen cinereum; alæ anticæ lineis subobsoletis, guttis costalibus exterioribus et marginalibus albis, lunulis marginalibus nigricantibus indistinctis, orbiculari et reniformi obsoletis; posticæ fuscescente-cineres, basi ciliisque pallidioribus.*

Female. Ferruginous-brown. Palpi porrect; third joint conical, not more than one-fourth of the length of the second. Thorax indistinctly banded. Abdomen cinereous. Fore wings with the transverse lines almost obsolete; some minute white dots along the apical part of the costa and along the exterior border, and on the exterior veins; marginal lunules blackish, indistinct; orbicular and reniform obsolete. Hind wings brownish cinereous, paler towards the base, and with pale ciliæ. Length of the body 6 lines; of the wings 16 lines.

a. United States. Presented by E. Doubleday, Esq.

Xylina? claufacta.

Mas. *Ferruginea; palpi ascendentes, articulo 3o conico brevissimo; antennæ subciliatæ; abdomen cinereum; alæ anticæ nigro conspersæ, lineis subobsoletis, guttis exterioribus nigricantibus, orbiculari et reniformi pallidis nigro marginatis, orbiculari oblonga obliqua; posticæ albæ, fusco marginatæ, lunulis marginalibus nigris attenuatis.*

Male. Ferruginous. Palpi ascending; third joint conical, not more than one-fourth of the length of the second. Antennæ very minutely ciliated. Abdomen cinereous. Fore wings flecked with black; lines obsolete, except the exterior median one, which is represented by a double row of blackish dots, and the submarginal one, which is indistinct; orbicular and reniform spots pale, with black borders; orbicular oblong, oblique, much smaller than the reniform, which is slightly excavated on the exterior side. Hind wings whitish, with brown borders; marginal lunules black, attenuated. Length of the body 6 lines; of the wings 15 lines.

a. East Florida. Presented by E. Doubleday, Esq.

Xylina orbifera.

Mas. *Ferrugineo-rufa; abdomen cinereum, apice cervinum; alæ anticæ posticæ albidæ, macula rotunda apicali alba, guttis marginalibus nigris elongatis, ciliis nigricante-cinereis; orbiculari, reniformi lineisque subobsoletis; posticæ cinereæ, margine diffuso æneo.*

Male. Ferruginous-red. Abdomen cinereous; tip fawn-colour. Fore wings whitish on more than one-third of the breadth from the interior border; a round white apical spot; marginal dots black, elongated; ciliæ blackish cinereous; orbicular and reniform spots and transverse lines almost obsolete. Hind wings cinereous, with diffuse æneous borders. Length of the body 5½ lines; of the wings 14 lines.

a. St. Domingo. From Mr. Tweedie's collection.

Dele Xylina infensa.

The specimen described and Hadena terens, p. 586, are identical.

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Dele Xylina lignisecta,

which is identical with the preceding species.

Xylina serrata.

Mas. *Cinereo-nigra; caput ferrugineum, fasciculatum; palpi porrecti, articulo 3o cylindrico brevissimo; antennæ subpectinatæ; thorax cristatus, antice ferrugineus, nigro bifasciatus; abdomen cinereum; alæ anticæ apud marginem interiorem ferrugineæ, maculis discalibus obsoletis, guttis exterioribus elongatis nigris, margine exteriore denticulato; posticæ cinereæ, denticulatæ, margine fuscescente.*

Var. *Thorax ferrugineo trivittatus; alæ anticæ ferrugineo variæ.*

Male. Cinereous-black. Head ferruginous, tufted. Palpi porrect; third joint cylindrical, not more than one-fourth of the length of the second. Antennæ slightly pectinated. Thorax with a high crest, ferruginous in front, and with two black bands, the hind one accompanied by whitish speckles. Abdomen cinereous. Fore wings ferruginous along the interior border; exterior border

deeply denticulated; discal spots obsolete; a row of exterior elongated black dots. Hind wings cinereous, denticulated, with brownish borders. Length of the body 7 lines; of the wings 18 lines.

Var. Thorax with three ferruginous stripes. Fore wings irregularly varied with ferruginous.

a, *b*. Tasmania. Presented by Morton Allport, Esq.

XYLINA? LIGNIPLENA.

Mas. *Ferruginea; palpi ascendentes, articulo 3o cylindrico subelongato; antennæ subpectinatæ; thorax nigro unifasciatus et quadrivittatus; abdomen basi subalbidum; alæ anticæ disci medio nigricante, lineis angulosis nigris pallido marginatis, orbiculari et reniformi parvis indistinctis pallido marginatis, venis nigricantibus, lunulis marginalibus nigris, margine vix denticulato; posticæ æneo-fuscæ, subtus pallidiores macula discali fasciaque lata submarginali nigricantibus.*

Male. Ferruginous. Palpi ascending, almost vertical; third joint cylindrical, full one-third of the length of the second. Antennæ slightly pectinated to three-fourths of the length. Thorax with a black band in front, and with two black stripes on each side. Abdomen paler than the thorax, almost whitish at the base. Fore wings somewhat blackish in the middle of the disk, with zigzag transverse black lines, which have pale borders, the latter most distinct in the submarginal line; orbicular and reniform spots with pale borders, small and indistinct, the latter with a white dot by its hind border; veins mostly blackish; a row of black lunules along the exterior border, which is hardly denticulated. Hind wings æneous-brown; under side paler, with a black basal streak, a black discal spot, a broad blackish submarginal band, and black marginal lunules. Length of the body 7 lines; of the wings 16 lines.

a. Tasmania. From Mr. A. J. Smith's collection.

Page 632.

Genus MAGUSA.

Mas. Corpus sat robustum. Proboscis brevis. Palpi ascendentes; articulus 3us longi-conicus, 2i trientis vix brevior. Antennæ simplices, gracillimæ, corporis dimidio non longiores. Abdomen alas posticas perpaullo superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ anticæ angustæ,

apud costam rectæ, apice rotundatæ, margine exteriore mediocriter obliquo vix convexo.

Male. Body moderately stout. Proboscis short. Palpi ascending; third joint elongate-conical, nearly one-third of the length of the second. Antennæ simple, very slender, about half the length of the body. Abdomen extending very little beyond the hind wings. Legs moderately stout; hind tibiæ with rather long spurs. Fore wings narrow, straight in front, rounded at the tips, moderately oblique, and very slightly convex along the exterior border.

1. Magusa strigifera.

Mas. *Pallide cervina, subtus albida; alæ anticæ obscuriores, cano variæ, strigis paucis nigricantibus, macula apicali cana, lineis fuscescentibus undulatis indistinctis, guttis marginalibus elongatis, orbiculari et reniformi subrotundis; posticæ cinereæ, fusco marginatæ, ciliis albidis.*

Male. Pale fawn-colour, whitish beneath. Fore wings darker fawn-colour, varied with hoary, and with a few blackish streaks; a hoary apical spot emitting a streak, which inclines slightly towards the costa; transverse lines brownish, undulating, indistinct; marginal dots elongated, and forming a slightly interrupted blackish line; spots nearly round; orbicular about half the size of the reniform. Hind wings cinereous, with brown borders; ciliæ whitish. Length of the body 6 lines; of the wings 15 lines.

a. St. Domingo. From Mr. Tweedie's collection.

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Genus RHATTA.

Mas. Corpus gracile. Proboscis mediocriter longa. Palpi oblique ascendentes; articulus 3us cylindricus, brevissimus. Antennæ subciliatæ, corporis dimidio longiores. Abdomen oblanceolatum, alas posticas plus triente superans; fasciculus apicalis longissimus. Pedes graciles; tibiæ posticæ calcaribus longis. Alæ anticæ angustæ, apud costam rectæ, apice acuminatæ, margine exteriore perobliquo.

Male. Body slender. Proboscis moderately long. Palpi obliquely ascending; third joint cylindrical, about one-fourth of the length of the second. Antennæ minutely ciliated, more than half the length of the body. Abdomen oblanceolate, extending for more than one-third of its length beyond the hind wings; apical tuft very

long. Legs slender; hind tibiæ with four long spurs. Fore wings narrow, straight in front, acuminated at the tips, very oblique along the exterior border.

1. Rhatta cramboidina.

Mas. *Pallidissime cervina; abdomen albidum; alæ antice albidæ, cinereo marginatæ, vitta discali cervina arcuata dilatata antice nigro marginata, orbiculari et reniformi e guttis albidis nigro pupillatis; posticæ albidæ.*

Male. Very pale fawn-colour. Abdomen whitish. Fore wings whitish, cinereous about the borders, with a fawn-coloured curved dilated discal stripe, which is bordered in front by a black line; orbicular and reniform spots indicated by two whitish dots with black centres. Hind wings whitish. Length of the body 7 lines; of the wings 14 lines.

a. Santarem. From Mr. Bates' collection.

Edward Newman, Printer, 9, Devonshire Street, Bishopsgate.